THE

BOTANICAL EXCHANGE CLUB

OF THE BRITISH ISLES.

REPORT FOR 1895.

BY

WILLIAM H. BEEBY, F.L.S.

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THE BOTANICAL EXCHANGE CLUB OF THE BRITISH ISLES.

REPORT OF THE EDITOR FOR 1895.

The plants received for distribution number about 3,056. As compared with those sent in for 1894, this shows a falling off of nearly 900, due in part to the absence abroad of one of the largest contributors for that year. The parcels, generally speaking, are made up sufficiently in accordance with the Rules, not a few being models of what is required. Among the latter may be mentioned that of the late Mr. H. C. Levinge, by whose death at Knock Drin on the 11th March, 1896, the Club loses a valued member. There are still, however, a few members who continue to treat with indifference the provisions contained in Rule 4, by placing a number of labels on the same sheet, or by sending in plants on small pieces of paper spread in various positions over a large sheet, a point to which attention was directed in the Report for 1893. Thus additional mechanical labour, which belongs to each member individually, is imposed upon the Editor and Distributor; however, those who do not comply with the rules of a club to which they belong, cannot reasonably complain if their queries receive but scant attention unless calling for investigation in the interests of the Club generally.

The thanks of the members are due to the following botanists for reporting on the various plants submitted to them :—Rev. W. Moyle Rogers, *Rubi*; Prof. Crépin, *Rosæ*; Mr. F. J. Hanbury, *Hieracia*; Mr. Arthur Bennett, *Potamogeton* and sundry other plants; Mr. Alfred Fryer, *Potamogeton*; Prof. Ed. Hackel, *Gramina*; Messrs. H. and J. Groves, *Characeæ* and sundry other plants; and to Prof. E. Koehne, Prof. R. von Wettstein, Messrs. E. G. Baker, and Mr. F. T. Mott for their reports on various critical plants.

The contributions were as follows :—

	No. of Specimens.
Mr. Joseph Adair	37
Mr. Charles Bailey, *F.L.S.*	200
Mr. W. H. Beeby, *F.L.S.*	49
Mr. Arthur Bennett, *F.L.S.*	40
Mr. G. C. Druce, *M.A.*, *F.L.S.*	185
Mr. S. T. Dunn, *B.A.*, *F.L.S.*	37
Mr. Alfred Fryer	24
Mr. J. E. Griffith, *F.L.S.*	250
Mr. J. Groves, *F.L.S.*	38
Mr. A. B. Jackson	24
Mr. Lester V. Lester	68
The late Mr. H. C. Levinge, *M.A.*, etc.	266
Rev Augustin Ley, *M.A.*	182
Rev. E. F. Linton, *M.A.*	146
Rev. W. R. Linton, *M.A.*	313
Rev. E. S. Marshall, *M.A.*, *F.L.S.*	260
Mr. J. Cosmo Melvill, *M.A.*, *F.L.S.*	72
Mr. F. T. Mott, *F.R.G.S.*	34
Rev. W. H. Painter	130
Miss C. E. Palmer	98
Rev. W. Moyle Rogers, *M.A.*, *F.L.S.*	78
Mr. W. A. Shoolbred	62
Mr. A. Somerville, *B.Sc.*, *F.L.S.*	56
Mr. S. A. Stewart	70
Mr. F. Townsend, *M.A.*, *F.L.S.*	37
Mr. George Webster	65
Mr. J. A. Wheldon	94
Mr. J. W. White, *F.L.S.*	141
Total	3,056

October, 1896.

WILLIAM H. BEEBY.

Thalictrum collinum, Wallr. Near Colwyn Bay, Denbighshire, July, 1895.—W. H. PAINTER. "I should rather have considered this a form of *T. dunense*, Dum."—Ar. Bennett.

T. flavum, L. Wet meadow near Twyford, S. Hants, September, 1890.—J. GROVES. "I suppose best placed under var. *sphærocarpum*, though the inflorescence is not characteristic, but according to Boswell (E.B. iii.), the characters of the shape of the fruit and panicle do not always go together."—J. Groves. "This also is my experience."—W. H. B.

Ranunculus trichophyllus, Chaix. In a field ditch by the banks of the Clewydd, near Ruthin, Denbighshire, 30th September, 1895. Not recorded for county 50 in 'Topographical Botany.'—CHARLES BAILEY. "Yes."—H. and J. Groves.

R. heterophyllus, Web. ex p., var. *triphyllus*, Hiern. Ditch, Mitcham Common, Surrey, 23rd May, 1885.—H. GROVES. "This plant was named *triphyllus* by Mr. Hiern. We are inclined to doubt whether it is the *R. triphyllos* of Wallroth. It is a well-marked form of *R. heterophyllus* with nearly glabrous carpels and cuneate leaf segments, with somewhat hollowed margins."—H and J. Groves.

R. floribundus, Bab. Pit near Brassington, Derby, 17th June, 1895.—W. R. LINTON. "No doubt a small state of *R. peltatus*, but such miserable scraps are quite useless for distribution."—H. and J. Groves.

R. peltatus, Schrank, var. *floribundus*, Bab. Yeldersley, Derby, 31st May, 1887.—W. R. LINTON. "See observation on the Brassington plant. This appears to be an ordinary form of *R. peltatus*, but it was either collected too early, or care was not taken to select mature specimens. It is futile to collect Batrachian Ranunculi at haphazard, as in the present state of knowledge of this group it is necessary, for satisfactory determination, to have good specimens of well-grown plants with at least three or four heads of fruit as well as flowers."—H. and J. Groves.

R. Ficaria, Linn. Swinley, Berks, June, 1895, in fruit. I thought some fruiting specimens, which are said to be rare, might be acceptable to some members. In the dry season of 1895, it did not appear to be unfrequent in dry situations. These occurred under the shade of trees in Swinley Park. They belong to the variety *divergens*, F. Schultz, but some of the specimens are not typical.—G. C. DRUCE.

Caltha palustris, Linn., var. This form of *Caltha*, with narrow non-contiguous sepals, occurred in the Cumnor Meadows, in Berkshire, in May, 1895. It may perhaps be referred to the var. *Guerangerii*.—G. C. DRUCE. "I think best placed under var. *Guerangerii*, but not well marked. Dr. Huth states, in his 'Iconographie der Gattung *Caltha*,' that after examining many hundreds of

fresh specimens, he finds no constancy in either the size of the flowers, size and shape of the fruit, or the cutting of the leaves, etc.; for this reason, as mentioned in the 'Report' for 1893, he reduces *Guerangerii* to a form."—W. H. B.

C. palustris, L. var. *procumbens*, Beck. Marshy ground, Loch Insh, near Aviemore, v.c. 96, 15th June, 1894. Mr. G. C. Druce remarks:— "Certainly an intermediate *C. palustris* and *C. radicans* but not so near the latter plant as some forms I saw in Glen More. As I have stated, I do not think *C. radicans* is specifically distinct from *C. palustris*, and I am not certain how *radicans* can be separated from var. *procumbens*."—A. SOMERVILLE. "In the 'Scottish Naturalist,' 1888, p. 210, I gave my reasons, founded on experiment, for considering that the only constant distinction between *C. palustris* and *C. radicans* is to be found in the rooting stem of the latter plant, all the other characters being common to both plants. The most natural arrangement accordingly appears to me to be the following:—

Caltha palustris, L.

Subsp. I. *C. vulgaris* (sensu lat.)
varr. ad lib.

,, II. *C. radicans* (sensu lat.)
varr. ad lib.

This is practically the arrangement adopted by Dr. Huth in his 'Monographie' (1891), where *C. palustris* is divided into two main sections, characterised respectively by the rooting and non-rooting stem. But Dr. Huth letters his varieties continuously through these two sections, so that, when reduced to catalogue form, his primary sub-division entirely disappears, which I think a disadvantage. Forster's original plant is simply a very rare form of the sub-species ii., just as the form of sub-species i. with similar leaves is extremely rare. To continue to make the leaf-form a specific or sub-specific character is most artificial, and Watson well remarked of Forster's plant ('Cybele,' vol. i., p. 92) that it may be retained as a book species "in compliment to its author," but that it is no species in nature. I should not hesitate, therefore, to call Mr. Somerville's plants one, or rather several, of the numerous forms of *C. radicans*. The var. *procumbens*, Beck, was published in Dr. Huth's 'Monograph,' and the leaves, which are not figured, are described as "cordate-reniform, crenate or subentire." I scarcely think, therefore, that any of Mr. Somerville's plants can be exactly this variety, if the description is accurate; one of them has rather coarsely dentate leaves; in all the leaves are either longer than broad, or about equally long and broad, the latter of course coming nearest to the description. I cannot bring myself to think that Dr. Huth would have used the term 'cordate-reniform' except to describe a leaf which was appreciably broader than long, and I think that, speaking generally, the leaves of Mr. Somerville's plants should be described as cordate-orbicular. The above remarks, so far as they specially refer to the plants under consideration, are made on the supposition that they belong to the rooting sub-species. This appears to me probable; but as persistently non-rooting prostrate forms do

occur, I regard it as a matter of opinion and not of fact. Mr. Somerville has shown me a plant with rooting stem from Loch Insh, gathered on the same day; but the plants sent do not show the character."—W. H. Beeby.

Papaver hybridum, L. Colwyn Bay, Denbighshire, July, 1895.—W. H. Painter. New County record.

Fumaria pallidiflora, Jord. or *F. confusa*, Jord. Colwyn Bay, Denbighshire, July, 1895.—W H. Painter. "Not *F. confusa*; probably weak *F. pallidiflora*."—H. and J. Groves. New County record.

Barbarea intermedia, Boreau. Shirley, Derby, 17th May, 1895. The same plant as was commented on in 'B. E. C. Rep.' 1889, p. 244, and 1890, p. 283. Growing here, this plant becomes more luxuriant, and the pods are somewhat less adpressed to the rachis. It is a plant of cultivated ground, not of brookbanks and waysides as *B. vulgaris* is; its upper leaves are pinnatifid, its petals are less than twice as long as the sepals, its pod is short pointed. Specimens agreeing very closely with my plant were gathered in Surrey by Messrs. Marshall and Wolley Dod, and confirmed as *intermedia* by Svanté Murbeck, but pronounced to be *B. vulgaris* in the 'Rep. of the Watson Club,' 1893-4, and 1894-5, Appendix. So that there seems some variance as to this species between British and Foreign connoisseurs of the genus.—Wm. R. Linton. "Among some *Barbareas* of Mr. Marshall's, which I sent some time ago to Docent Murbeck, there were several which were named by him *B. intermedia*. The plant mentioned by Mr. Linton is no doubt the one from a bank near Thursley, Surrey; this much resembles Mr. Linton's plant, the others do not. The Shirley specimens now sent are immature, and descriptions of the fruiting raceme are scarcely applicable to plants in that condition, because the relative proportions of the pods change greatly as they ripen. I do not see the affinity with *B. vulgaris*, and think that this plant differs chiefly from our ordinary *B. præcox* when in a similar stage of growth, in the pods not being incurved. *Barbareas*, however, seem to be liable to aberrations of this sort, and I think that ripe fruit will probably show Mr. Linton's plant to be a form of *B. præcox*. As the latter plant is still cultivated, it is very likely that there are several forms of it of garden origin. Besides this, Jordan described three species which are now treated as varieties in Camus' 'Catalogue.'"—W. H. Beeby.

Arabis petræa, Lam., var. *hispida*, DC. Larig Pass, at 2,500 feet, Cairnagorms, v.c. 96, 21st July, 1892. Mr. Ar. Bennett says (24th January, 1896), "Yes, I think your *Arabis petræa* may go to the var. *hirta*, Koch, 'Syn,' Ed. 2 p. 44. There seems some doubt whether this is De Candolle's *hispida*."—A. Somerville.

Arabis perfoliata, Lam. Milford, Surrey, 4th May, 1895. These specimens are sent in order to show the spring rosette of root-leaves, which are usually quite withered by the time that the plant is in full flower.—Edward S. Marshall.

Erophila. Ridgeway, Berks, May, 1895; and Shrivenham, Berks, May, 1895.—G. C. DRUCE. "I have been unable to do anything with these, since I have not succeeded in obtaining opinions on two large parcels sent abroad over a year ago."—W. H. B.

Cochlearia micacea, Marshall. Root from Perthshire. Garden, Milford, 7th May and 15th June, 1895.—E. S. MARSHALL.

Cochlearia danica, L., var. Walton Gaol, Lancashire, April and October, 1895. Having had two different opinions regarding this plant (see 'Report,' pp. 401 and 464), I thought a further supply might prove of interest to the members.—J. A. WHELDON. "I do not see any reason for calling this a variety; it is an ordinary annual form of the plant. Syme ('Eng. Bot.' iii.) doubted whether this species ever bore angulated root-leaves, and my own limited experience in growing the plant from seed would have led me to the same conclusion; but Mr. Wheldon's specimens show that the radical leaves are occasionally slightly angulated. When the plant assumes the biennial habit, however, the apex of the root-stock usually branches at the end of the first season's growth, and each of these heads produces a tuft of ivy-like leaves; but these are not the true root-leaves. In the 'Report' for 1894, p. 464, Mr. Marshall speaks of a plant from the above locality as being "untypical" for *C. danica* on account of the "stalked stem-leaves," etc. I do not know the meaning of this, unless we are to infer that the specimen in Linn. Herb. has sessile stem-leaves. If so, while it may be technically the type, it would certainly be a very uncharacteristic example of the species as it usually occurs in nature."—W. H. Beeby.

Erysimum repandum, L. Alien; St. Philip's Marsh, Bristol, 2nd May, 1894.—JAS. W. WHITE.

Brassica ——— ? Southern shores of Lough Mask, Co. Mayo and Co. Galway, 11th July, 1895. This occurs at intervals, sometimes in great profusion, on barren shingly limestone, near the water's edge. It has quite the look of a wild plant, and I was unable to trace it into cultivated soil. So far, indeed, as I was able to explore, the shores of this part of Lough Mask are left untilled. In all the stations where I observed this form, it was fully half-a-mile from the nearest field or garden.—EDWARD S. MARSHALL. "This seems to me *Brassica Rapa*, var. *Briggsii*; just such a state of the plant as the conditions described would be likely to produce."—W. H. B. "I think you are correct in referring this to *B. Rapa*, var. *Briggsii*."—Ar. Bennett. —(See 'Jour. Bot.,' 1896, p. 251.)

B. Rapa, v. *silvestris*, H. C. Watson. Near Mayfield and Tutbury, Derby, 1st and 27th June, 1894-5. The flowers are rather bright yellow, but the leaves, especially the stem leaves, fully glaucous. The plant is wild and abundant along the Dove for the greater part of its course. As it has been reported from Dovedale before, I send a few

plants for verification, and should be glad to be assured that it is correctly named.—Wm. R. Linton. "Seems to me the same as the Thames side *sylvestris*, but it would be well to see early leaves."—W. H. B.

Capsella Bursa-pastoris, Moench., var. *bifida*. Kingsweston Down, West Gloucester, 11th May, 1890.—Jas. W. White "I should place this *Capsella* with *brachycarpa* rather than with *bifida*. The equilateral capsules are typical of *brachycarpa*, and although the radical leaves approach those of *bifida*, they are too small for that form, though more entire than is usually found in *brachycarpa*."—F. A. Mott.

Helianthemum guttatum, Mill. La Corbière, Jersey; 8th June, 1894.—Jas. W. White.

H. vineale, Pers. Ballyryan, Burren, co. Clare, June, 1895. Leg. P. B. O'Kelly. Vide 'Report' for 1894, p. 436. These specimens from the main land are even less hairy than those sent last year from the Island of Arran, and, I suppose, fairly represent the variety.—H. C. Levinge. "This seems to me a more diffuse plant than the Cronkley Fell one; the raceme more elongated and flowers larger."—Ar. Bennett.

Viola Reichenbachiana, Bor. Plant from Greywell, N. Hants; grounds at Odiham, April, 1894 and 1895; seed, 14th May, 1894.—C. E. Palmer. A beautiful series of *V. silvestris*, Reich., *f. leucantha*, G. Beck. The specimens have been most carefully laid out for drying, so that the shape of the leaves is seen at once, a feature too often obscured by want of care. Although by no means a character that can be relied on with safety, it is often noticeable that the leaves of this species are longer in proportion to their breadth than is the case with those of *V. Riviniana*; this character is strongly marked in Miss Palmer's plants."—W. H. Beeby.

V. silvestris × *Riviniana*. Shirley, Derby, 20th May, 1895. A few specimens from a plant which has arisen spontaneously in the garden among a quantity of both parents.—Wm. R. Linton. "I have no doubt Mr. Linton is right, but I should hesitate to speak definitely of this hybrid without further experience of this particular plant."—W. H. B.

Viola stagnina, Kit. South side of Lough Mask, co. Mayo, 8th July, 1895. Unfortunately, owing to the extraordinary drought of last summer, the plants were quite past flowering; and it is not unlikely that some of the specimens sent may be hybrids, or states of *V. ericetorum*, Reich., which also occurs hereabouts, as well as *V. Riviniana*. New to the county Mayo, I believe.—Edwin S. Marshall. Limestone banks of lake; south end of Lough Mask, co. Mayo, 8th July, 1895.—W. A. Shoolbred. "Both of these are mixed gatherings, consisting chiefly of *V. ericetorum* × *stagnina*,

together with each of the parent plants. The examples of *V. stagnina* are very few in Mr. Marshall's parcel, more numerous in Mr. Shoolbred's. The only specimens distributed are thase of *V. stagnina*, and those which are probably referable to the hybrid mentioned. This hybrid is certainly present, but in mixed gatherings of this sort, where at least three forms are included to a great extent in scraps, I feel it prudent not to commit myself to a more definite opinion, especially as the plants are not dried with the leaves laid out so as to show their true form. I do not recognise any *V. Riviniana*."—W. H. Beeby.

Gypsophila paniculata, Linn. Occurred as a casual plant near the Southampton Docks in August, 1895. It is a native of eastern Europe, and was probably introduced with Russian corn.—G. Claridge Druce. Alien; on old colliery débris near Kingswood, West Gloucester, Sept., 1892.—Jas. W. White.

Silene dichotoma, L. Alien; on rubbish in St Philip's Marsh, Bristol, July, 1892.—Jas. W. White.

Cerastium arvense, L., v. *Andrewsii*, Syme. Burren, co. Clare, June, 1895, leg. P. B. O'Kelly. Vide remark in 'Report' for 1894, p. 438. The specimens now sent are certainly less hairy than those contributed last year.—H. C. Levinge.

Stellaria nemorum, L. Ecclesbourne Brook, Derby, 28th May, 1895. New locality.—W. R. Linton.

Buda marina, Dum. Colwyn Bay, Denbigh, July, 1895.—W. H. Painter. "I am in some doubt as to this; I incline to think it a young specimen of *B. rupestris*."—Ar. Bennett.

Elatine Hydropiper, L. (fruit.) Muddy margin of Cut mill pond, Puttenham, Surrey, 28th Sept., 1895.—W. A. Shoolbred.

Hypericum elodes, L. Mangotsfield Common, West Gloucester, 7th July, 1895. New County Record. Discovered by Mr. Withers a year or two ago.—Jas. W. White.

Malva moschata, Linn. var. *Ramondiana*, Gren. et Godr. 'Fl. Fr.' i,, p. 289, where it is described as having "feuilles toutes entières, dentées." It occurred in a gravelly heathy field near Tilehurst, Berkshire, August, 1895, and from its bright coloured flowers and nearly entire leaves was a conspicuous plant. *Malva moschata* is common in the vicinity, but more frequently as the type—the var. *laciniata*, Gren. et Gr. l.c. "Toutes les feuilles divisées en lanières étroites." Occasionally the var. *intermedia*, Gren. et Godr. l.c. occurs; this has "feuilles caulinaires divisées en lanières étroites; les radicales réniformes crénelées." I have not seen the var. *Ramondiana* elsewhere. In France it appears to be rare, since Gren. et Godr. only record it from the Bagnères de Luchon, where Ramond's

Herbarium is preserved, and which I had an opportunity of inspecting a few years back.—G. Claridge Druce. "A very interesting variety of *Malva moschata*, L. This certainly must closely approach var. *Ramondiana*, Gren. et Godr., but I only know this from the description, which is "feuilles *toutes* entières, dentées." The upper leaves here are certainly lobed."—E. G. Baker.

Impatiens biflora, Walt. seems now to be well established in several places on the banks of the Enborne stream, which forms the boundary between Hants and Berks. It was originally introduced at Highclere Park, and from thence it appears to have spread along the stream for some miles. It is abundant at Washwater, about three miles from Newbury. 7th September, 1895.—A. B. Jackson.

Ononis repens, v. *horrida*, Lange. Near Moechras, Merioneth, 8th Aug., 1895. The older plants produced spines according to statements in 'J. Bot.,' 1881, p. 358, and 1884, p. 215. Not realising this at the time I only gathered mostly younger and spineless pieces, and consequently though these are the true plant they do not well represent it.—Wm. R. Linton. "Probably correct; the absence of spines I believe to be because the specimen is only two years old. The third year spines are produced."—Ar. Bennett.

Melilotus, sp. — Waste ground, St. Philip's Marsh, Bristol, Gloucestershire, 16th September, 1895.—S. T. Dunn. "Is *Medicago falcata*, of course an alien here."—W. H. B.

Medicago denticulata, Willd., var. *lappacea*, Desr. Sandy fields, Tilford, Surrey, 1st Oct., 1895.—W. A. Shoolbred. "This matches Mr. Reginald Pryor's Bedfordshire specimens. For an interesting note on *Medicago lappacea*, Lam., see 'Journ. Bot.,' 1876, p. 22. The chief points of difference given there in order to distinguish this plant from *M. denticulata* are the generally fewer flowers; the large subglobose burr-like pods are less deeply and regularly veined, and the veins themselves take a different direction; the uppermost whorl is larger in proportion and covers much more of the next; the spines are radiant, standing out horizontally, and are not set at an oblique angle; the seeds also are said to be rather oblong than reniform; the whole plant is said to be coarser and ranker, and of a more succulent and leafy habit."—E. G. Baker. "Doubtless an alien, but there is no note sent on the point. I have it from Mr. Marshall, under same date and apparently from same locality, as a clover-field plant, introduced with the crop."—W. H. B.

M. lupulina, Willd., var. *Willdenowiana*, Koch. Bury Fields, Odiham, N. Hants, 11th October, 1895.—C. E. Palmer. Roadside, Worplesdon, Surrey, 24th July, 1895.—W. H. Beeby. (See 'Journ. Bot.,' 1895, pp. 315, 377.)

Melilotus indica, All. This plant was introduced into a meadow in Odiham, N. Hants, with wheat seed from America. The wheat seed was sifted and the dust thrown upon this meadow in 1893. The next

year, 1894, a number of foreign plants came up; *Trifolium resupinatum*, L.; a handsome *Cnicus* near to *pycnocephalus*, L.; *Centaurea Calcitrapa*, L., new to district, &c.; but only *M. indica*, All., has appeared this year, 31st July, 1895. This plant seems to have settled itself in quantities in the meadow, 7th September, 1895.—C. E. PALMER. I have since found this plant growing in great plenty in the Hop Gardens, on quite a different part of Odiham.—C. E. P. "I do not think this is an American species. At all events it is not a native of Canada, although it has occurred there as a casual (*fide* Macoun, 'Cat.')."—W. H. B.

Trifolium hybridum, L. Colwyn Bay, Denbighshire, July, 1895. —W. H. PAINTER.—New County Record.

Lotus tenuis, Kit. Waste pasture land between Hurst Castle and Milford-on-Sea, S. Hants, June, 1895.—J. COSMO MELVILL.

Lathyrus niger, Wimm. Cult. Bournemouth, June and July, 1894.—W. MOYLE ROGERS. Shackleford, Surrey, 24th June, 1895; naturalised.—E. S. MARSHALL.

Prunus Cerasus. Near Egremont, Cumberland, 24th May, 1895. This is not included in the last edition of Watson's 'Topographical Botany.' I found it growing in hedges about a mile east of Egremont some seven or eight years ago; since then I have found it in many places—always in hedges—both north-east, east, and south of Egremont, in about twelve to twenty different places.—JOSEPH ADAIR. "Mentioned in 'Top. Botany' as a very doubtful record for Cumberland. The present specimens appear to be rightly named."—W.H.B.

Rubus idæus, Linn., var. *asperrimus*, Lees. Alum Chine, Bournemouth, S. Hants. June, 1894, and 6th July, 1895.—W. MOYLE ROGERS. "Faunt's Bog," Knock Drin, Co. Westmeath, 27th July, 1895. New to Distr. VII, 'Cybele Hibernica.'—H. C. LEVINGE. "Not quite Lees' plant, which has '*tawny* setaceous bristles.'"—W. M. R.

R. fissus, Lindl. Mere Clough, Prestwich, S. E. Lancashire, 26th July, 1895. Named by Rev. E. S. Marshall. New for v.c. 59. Hitherto considered *R. suberectus*, Anders., in this locality.—J. C. MELVILL. "Undoubtedly *R. fissus*."—W. M. R.

R. plicatus, W. & N., form. About Drwsynant, Merioneth, Aug., 1895. A form approaching *R. nitidus*.—WM. R. LINTON. "This handsome, long-stamened form of *R. plicatus* seems to me identical with Slesvig specimens of *R. Bertramii*, G. Braun, that I have received from Mr. Friderichsen. It is far from being an uncommon British form."—W. M. R.

R. plicatus, W. & N., var. Drwsynant and Rhydymaen, Dolgelly, Merioneth, 6th and 7th Aug., 1895. A narrow-leaved variety not so common as the type.—WM. R. LINTON. "This hairy, narrow-leaved

form goes best, I think, under var. *hemistemon* (P. J. Muell.), as probably does Mr. Bailey's plant from glen on road north from Banavie, N. Argyllshire, 17th July, 1895."—W. M. R.

Rubus Rogersii, Linton, E. F. Linton. Hedge on road from Culcrieff to the Knock of Crieff, Mid Perth, 5th Oct., 1894.—CHARLES BAILEY. Also, barren stems, peat moss, Aughnadarragh, Co. Down, 1st Sept., 1894; panicles, peat moss, Saintfield, Co. Down, 27th Aug., 1894. Coll. C. H. Waddell; comm. J. A. WHELDON. "Most characteristic Scottish and Irish specimens of this species."—W. M. R.

R. opacus, Focke. Peat moor, Burtle, N. Somerset, 31st July, 1895. Very abundant on the peat moors of N. Somerset, where *R. plicatus* is not known to grow.—JAMES W. WHITE. "Characteristic."—W. M. R.

R. latifolius, Bab. Near Ty Croes R. Station (July), and near Llangefni (August), Anglesey, 1895.—J. E. GRIFFITH. "Yes."—W. M. R.

R. erythrinus, Genev. Whitebrook, Monmouthshire, 14th Aug., 1895.—AUGUSTIN LEY. "Undoubtedly right, though with most of the leaflets exceptionally long."—W. M. R.

R. nemoralis, P. J. Muell., var. *Silurum*, A. Ley. Rhydymaen, Merioneth, 3rd Aug., 1895,—WM. R. LINTON. "Undoubtedly right, I believe."—W. M. R.

R. pulcherrimus, Neum. Near Colwyn Bay, Denbighshire, 23rd July, 1895.—W. H. PAINTER. Near the Knock of Crieff (two localities), Mid-Perth, 4th and 5th Oct., 1894; sides of the brook above Llys-y-gwynt, near Llanfairfechan, N. E. Carnarvonshire, 5th Oct., 1895; road from Bromborough to Eastham Locks, near Birkenhead. N.W. Cheshire, 13th Oct., 1894; Raccliff Wood, western side of Rudyard Lake, N. Staffordshire, 26th Aug., 1895.—CHARLES BAILEY. "All rightly named, I think, though most of the material was collected too late for certain determination. New County records for Denbigh and Mid-Perth."—W. M. R.

R. Lindebergii, P. J. Muell., E. F. Linton. Hedge on the Beacon Hill above Scaws, near Penrith, S. E. Cumberland, 26th Sept., 1894.—CHARLES BAILEY. "Yes, a new County record"—W. M. R.

R. dumnoniensis, Bab. Hedgerows, Milford-on-Sea, S. Hants, 24th June, 1895.—J. COSMO MELVILL. "Yes."—W. M. R.

R. mercicus, Bagnall, var. *chrysoxylon*, Rogers. Nant Offeren, Bangor, Carnarvonshire, July, 1895.—J. E. GRIFFITH. "The plant described by me under this name as a new variety, in Mr. Griffith's 'Flora of Anglesey and Carnarvonshire,' p. 43."—W. M. R.

R. villicaulis, Koehl, var. *Selmeri* (Lindeb.), E. F. Linton. Edge of Derwentwater, Grange-in-Borrowdale, Cumberland, 28th Sept., 1894; also in the open, on rough ground about a quarry between Bridge End and Oakwood, north of Hexham, S. Northumberland, 21st July, 1894.—CHARLES BAILEY. "In the Derwentwater packet two of the specimens are *R. Selmeri*, but the rest are *R. Lindleianus*. The beautiful Hexham specimens are all good *Selmeri*."—W. M. R.

R. gratus, Focke, var.? Walton, Lancs., 6th Aug., 1895. A further supply of the foliaceous-sepaled plant referred to on page 440 of the 'Report.'—J. A. WHELDON. "Certainly *R. gratus*, I think, though with untypical leaves; but then all the stem pieces sent are exceptionally weak."—W. M. R.

R. leucandrus, Focke. Hedgerows, Milford-on-Sea, S. Hants. 24th June, 1895.—J. COSMO MELVILL. "Apparently right, but specimens too immature for certainty."—W. M. R.

R. pubescens, Weihe, var. *subinermis*, Rogers. Depôt Road (and St. Leonard's Estate), Horsham, Sussex, 16th July, 1895. Abundant over a large area in W. Sussex.—J. W. WHITE. "A good supply of characteristic specimens. I have also seen it in great quantity near Bexley and Battle, E. Sussex."—W. M. R.

R. thyrsoideus, Wimm. (sp. collect.) (1.) Swarkestone, Derby., 6th Sept., 1895. In hedges and on banks about Swarkestone and Chellaston. Quite distinct in habit and appearance from *R. rusticanus*, which was plentiful in the same locality.—WM. R. LINTON. (2) Near Valley, Holyhead, Anglesey, September, 1895.—J. E. GRIFFITH. "(1.) Well marked *thyrsoideus*. (2.) A very remarkable and beautiful form, which I agreed with Mr. Griffith in placing under *R. thyrsoideus*. Dr. Focke writes of it: 'Certainly a *R. thyrsoideus* aggregate. It does not match, however, one of our sub-species growing in Central Europe. I think I saw plants like this one from France or N. Italy, but I cannot give a name.' "—W. M. R.

R. silvaticus, W. and N. (1) near Bethesda, Carnarvonshire, July, 1895—J. E. GRIFFITH. (2) Wood, Bigsweir, Monmouthshire, 14th August, 1895.—AUGUSTIN LEY. "(1) Yes. (2) I think, undoubtedly, a form of *R. Sprengelii*, Weihe, with some of the fruiting sepals only sub-patent, or occasionally even loosely reflexed, instead of rather ascending as usual. The more narrow-panicled specimens certainly recall *R. silvaticus*, but are still kept distinct from it by the numerous stalked glands on stem and panicle rachis and the longer more patent sub-umbellate branches. Flowering specimens would, of course, give other distinguishing characters."—W. M. R.

R. macrophyllus, W. & N., var. *Schlechtendalii*, (Weihe). (1) Nant-y-Glo, Colwyn, Denbighshire, July, 1895.—W. H. PAINTER. (2) "Briary Bent," Knock Drin, Co. Westmeath, 28th Aug., 1895.—H. C.

LEVINGE. "Both *Schlechtendalii* and new County records (and 'not previously distributed from Distr. VII, 'Cybele Hibernica' H. C. L.); but the Colwyn specimens are too poor to be characteristic."—W. M. R.

Rubus mollissimus, Rogers. Derwenteg woods, Bangor, Carnarvonshire, June, 1895.—J. E. GRIFFITH. "A very interesting new County record. Slightly differing from my type by rather shorter stamens and more deeply incised (or lobate-incised) leaves. The leaves are also thinner and less soft beneath, as is natural in a woodland form."—W. M. R.

R. cambricus, Focke. Perfeddcoed Road, near Bangor, Aug., 1895; also a very prickly form, near Cwm Glo, Llanberis, Carnarvonshire, Sept., 1895.—J. E. GRIFFITH. Bank of tramway, and (the prickly form again) open space Coed Pax, at the base of the débris on N. side of the Penrhyn Slate Quarries, near Bethesda, Carnarvonshire, 27th Sept., 1895. This and the other brambles named in this 'Report,' collected at Bethesda on the same date, I owe to the kind guidance and company of Mr. J. E. Griffith.—CHARLES BAILEY. "*R. cambricus* (allied to *R. Questierii*, Lefv. and Muell., though very obviously distinct from it) is described by Dr. Focke in Mr. Griffith's 'Flora of Anglesey and Carnarvonshire,' p. 46. The sepals, there spoken of as 'reflexed after flowering,' become erect in fruit. It is locally abundant in E. Carnarvonshire, and in 1890, the Rev. R. P. Murray found a form near Woking, which almost seems to furnish a link between it and *R. Questierii*. The prickly form (Llanberis and Bethesda) somewhat recalls the *R. infestus*, Weihe, growing with it at Bethesda. As is explained in 'Journ. Bot.' 1896, p. 286, the name *R. cambricus*, Focke (1895), must give place to *R. lentiginosus*, Lees, (1849)."—W. M. R.

R. Sprengelii, Weihe. Near Mere Clough, Prestwich, S. E. Lancashire, 26th July, 1894.—J. COSMO MELVILL. Dinting, Derby, fide W. M. Rogers, 22nd Aug., 1894. A most luxuriant plant growing in a copse in shade.—WM. R. LINTON. "The panicle of the Dinting plant seems conclusive evidence of the species, in spite of the abnormal stem pieces. The Mere Clough specimen is typical."—W. M. R.

R. pyramidalis, Kalt. (very hairy-stemmed form) W. M. Rogers. Banks of the Ogwen, near Bethesda, Carnarvonshire, 27th Sept., 1895. —CHARLES BAILEY. "In August, 1894, Dr. Focke, Mr. Griffith and I together saw this plant growing by the Ogwen, and then Dr. Focke, after some consideration, named it *R. pyramidalis*, as Mr. Bailey states I had previously done after examination of dried specimens. In Nov., 1894, however, Dr. Focke, in a letter to Mr. Griffith, named it *R. hirtifolius*, Muell. and Wirtg., and now that I have seen a great deal of *R. hirtifolius*, and gathered fresh specimens in two counties, I think the latter determination must stand, because of the lax panicle and the comparatively thin obovate leaflets."—W. M. R.

R. hirtifolius, Muell. and Wirtg. (1) Banks of the Caledonian Canal at Aberchalder, Central Invernesshire, 18th July, 1895.—CHARLES BAILEY. (2) Woods, Knock Drin, Westmeath, 31st July, 1895.—H. C. LEVINGE. (3) Corwen, 2nd Aug. (two slightly differing forms); (4) Rhydymaen, 3rd Aug.; (5) Bryncoedifor, 4th Aug.—all, (3), (4), and (5), Merioneth, 1895.—W. R. LINTON. (6) Siliwen Woods, Bangor, Carnarvon, Aug., 1895.—JNO. E. GRIFFITH. "These numerous specimens are plainly not identical, but seem to represent a series of allied forms. How many of them may be rightly placed under an aggregate *R. hirtifolius* I can hardly yet say with certainty, as the range of variation which that species may cover is still unknown to me. But (1) seems to be good *hirtifolius* (new County record); (2) is only kept from being identical with flowering specimens of Continental *R. danicus*, Focke, by some of its leaves being whitish-felted beneath; (3) and (4) appear somewhat intermediate between *R. hirtifolius* and *R. Newbouldii*, though, I think, nearer to the former (especially the Corwen specimens); while (5) may probably be better associated with other species (see below, under *R. curvidens*), and I should prefer labelling (6) *R. pyramidalis*, forma *umbrosa*."—W. M. R.

R. leucostachys, Schleich. forma. Rushton Spencer, N. Staffordshire, 26th August, 1895.—CHARLES BAILEY. "Yes forma *laciniata*."—W. M. R.

R. curvidens, A. Ley. "From five localities near together in Merioneth, 1895."—W. R. LINTON. (1) Llanbedr, 10th Aug.; (2) Llanfair, 12th Aug.; (3) Llanfair, 11th Aug.; (4) Llanfair, 8th Aug.; (5) by R. Afon Artro, 13th Aug. "Certainly not all identical. I consider (1) unmistakeably *curvidens*, and (2) a variety of the same, with almost or quite eglandular panicle and very few stalked glands on stem; (3) also seems a form of it, though with considerably different armature and uncharacteristic panicle. But (4) and (5) are surely not separable from Mr. Linton's Bryncoedifor '*R. hirtifolius*' (see above), and may prove a new species belonging to the *Radulae*."—W. M. R.

R. mucronatus, Blox., E. F. Linton. From three localities in S. Northumberland, 1894.—CHARLES BAILEY. (1) near Low Gate, on the high road to Hexham, 18th July; (2) in a wood about a quarry between Bridge End and Oakwood, north of Hexham, 21st July; (3) wood near a quarry, similarly situated, 21st July. "Young for ready determination, yet surely not *R. mucronatus*, Blox., but (1) *R. Lindebergii*, P. J. Muell.; (2) *R. pulcherrimus*, Neum.; (3) apparently *R. pyramidalis*, Kalt, forma *umbrosa*. (All three new County records.)"—W. M. R.

R. infestus, Weihe. Near Duffield, Derby., 2nd September, 1895. W. R. LINTON. "Yes; a strongly-armed form. New for the County." W. M. R.

R. Borreri, Bell Salt. Drwsynant, Merioneth, 6th August, 1895.—W. R. LINTON. "Less glandular than is usual in the south, and varying slightly towards var. *dentatifolius*. New record for Wales."—W. M. R.

Rubus radula, Weihe, var. *echinatoides*, Rogers. (1) Bush on the road to the Falls of Barwick, near Crieff, Mid. Perth, 3rd October, 1894. (2) Above the bridge, Hexham, S. Northumberland, 20th July, 1894. (3) Tramway-side, at base of débris, Penrhyn Slate Quarries, near Bethesda, N.E. Carnarvonshire, 27th September, 1895. Collected, all, by CHARLES BAILEY. "Not quite what I mean by my variety, any of them, though allied forms. (1) Intermediate between type and var. *echinatoides*, though nearer to the latter. (2) Like some forms of N. Wales and Mid England, with leaves mostly 3-nate and ashy-felted beneath, which I think best placed *under* this variety. (3) A very singular form which looks intermediate between *R. infestus*, (Weihe) and *R. cambricus* (Focke) (in Griffith, 'Fl. Angl. and Carn.' p. 46), though also in some respects recalling a form of *echinatoides* which I saw growing at Bethesda with those two species in 1894."—W. M. R.

R. Gelertii, Frider., var. *criniger*, Linton, E. F. Linton. Hedge in Glen Turret, near Crieff, Mid Perth, 2nd October, 1894.—CHARLES BAILEY. "This seems to me a form of *R. radula*, differing from the type (and so far approaching *R. criniger*) only in the rather less mixed armature of the very hairy panicle, and perhaps the somewhat greyer or greenish-grey tint of the leaves (due, I think, to the specimens having been gathered in Oct.) In file-like subglabrous stem, in shape of leaflets, and in the lax pyramidal panicle narrowing to the top, it is indistinguishable from typical *R. radula*, Weihe, which I have not hitherto seen from Mid. Perth."—W. M. R.

R. podophyllus, P. J. Muell. Cwm Bychan, Merioneth 9th Aug., 1895.—W. R. LINTON. "These specimens represent what I regard as the average Welsh form of this species. N. England plants seem usually more strongly armed."—W. M. R.

R. foliosus, W. & N. Charlesworth, Derby, 23rd August, 1894.—W. R. LINTON. "I believe certainly *R. podophyllus*, P. J. Muell., in spite of some features which recall small forms of *R. foliosus*."—W. M. R.

R. oigoclados, Muell. and Lefv., var. *Newbouldii*, Bab., "fide E. F. Linton. Less glandular than usual, teste W. M. Rogers." Crooked Wood, Co. Westmeath, 6th Aug., 1895.—H. C. LEVINGE. Also specimens from same locality, collected 27th July, 1895, by E. F. and W. R. LINTON. "The roundish (or at most bluntly angled) stem, with few and rather small prickles, recalls the Devon and Herefordshire plant for which Dr. Focke has suggested the name *oigoclados*. In other respects (*e.g.* broader softer leaflets and more compound panicle with longer laxer hair on rachis) the Westmeath plant agrees better with what I am calling *Newbouldii*."—W. M. R.

R. rudis, W. and N. Open coppice, Nuthurst, Sussex, 15th July, 1895. New County record. The plant grows in at least two widely separated localities.—JAS. W. WHITE. "Yes."—W. M. R.

R. Griffithianus, Rogers. Penhower Road, near Bangor, Carnarvonshire, July, 1895.—JNO. E. GRIFFITH. "The members are indebted to Mr. Griffith for characteristic specimens of this handsome strongly-marked bramble, living plants of which he showed to Dr. Focke and me in several localities about Bangor in 1894. My description of it will be found (as 'n. var. or n. sp.') in the 'Flora of Anglesey and Carnarvonshire,' p. 48. Its nearest ally in our list is, I think, *R. præruptorum*, Boul., from which it is readily distinguished by the much more hairy stem, the broadly-dilated vinous-red prickles and the very finely toothed incised white-felted smaller leaflets."—W. M. R.

R. scaber, W. and N., form? E. F. Linton. In shade, in a quarry between Bridge End and Oakwood, north of Hexham, S. Northumberland, 21st July, 1894.—CHARLES BAILEY. "I do not know this. It seems intermediate between *R. scaber* and *R. thyrsiger*, Bab."—W. M. R.

R.—— near the *Radulæ*. Rhydymaen, Merioneth., August, 1895. W. R. LINTON. "Mr. Linton considers this identical with a bramble from Aran Mawddy, in the same county, which he showed me last autumn, and which I then thought 'a good deal like *R. Borreri*, but seemingly a distinct form nearer the *Radulæ*' ('Journ. of Bot.,' 1895, 361). After examining the beautiful set of specimens now sent to the club, I am still unable to suggest a definite name; but in spite of the resemblance to *R. Borreri* in panicle I suppose it must be placed in the *Sub-Bellardiani* section of the *Radulæ*."—W. M. R.

R. thyrsiger, Bab. with less glandular stem, W. M. Rogers. Bank of the river near the stepping-stones, Bettws-y-Coed, East Carnarvonshire, 26th September, 1895.—CHARLES BAILEY. "In panicle this plant so closely recalls our *thyrsiger*, that in spite of the much less glandular stem and more roundish leaflets it is difficult to keep them apart. I have seen no other Welsh plant that could be named *R. thyrsiger*."—W. M. R.

R. Koehleri, W. & N., var. *pallidus*, Bab., E. F. Linton. Above the Hydro. on the high road to Hexham, S. Northumberland, 18th July, 1894; also between Bridge End and Oakwood, North of Hexham, 21st July, 1894.—CHARLES BAILEY. "Rightly named, I think. The former a very strong form."—W. M. R. Also hedge on the Beacon Hill above Carlton Hill, near Penrith, South-east Cumberland, 26th Sept., 1894.—CHARLES BAILEY. "Quite the right plant, I believe, and no doubt all one gathering, though in some of the panicles the armature of the rachis is much less mixed than in the others and than is usual."—W. M. R.

R. Marshalli, Focke and Rogers. Corwen, Merioneth, 2nd Aug., 1895; Aran Mawddwy, Merioneth, 5th August, 1895.—W. R. LINTON. "New County record. I see no difference between Mr. Linton's Corwen plant and the strong subglabrous Carnarvonshire form of *R. Marshalli*, referred to by me in 'Journ. Bot.,' 1895, 103, which I am

naming provisionally *semiglaber*, n. var., and distinguish by the following characters:—Stem usually quite glabrous. Mature leaves nearly naked beneath. Panicle usually broader and less straggling than in the type, with much less hairy rachis, larger flowers, and more ascending fruiting sepals. Prickles usually at least as densely crowded, and very unequal, but not quite so patent, and with fewer very long ones intermixed. Mr. Linton's Aran Mawddwy plant differs from this variety in being considerably more hairy, and from both type and variety by its larger, more coarsely toothed leaves, and by the presence of some more or less falcate prickles among the patent and slightly declining ones. On the whole, however, it seems nearer to *R. Marshalli* than to *R. Koehleri*."—W. M. R.

Rubus Marshalli, Focke and Rogers, W. M. Rogers. Clearing on hillside at the base of the débris on the north side of the Penrhyn Slate Quarries, near Bethesda, North-east Carnarvonshire, 27th September, 1895.—CHARLES BAILEY. "The form described above as *semiglaber*, n. var."—W. M. R.

R. hirtus, W. and K. (sp. coll.) Near Treffos, Anglesey, July, 1895. JNO. E. GRIFFITH. "Placed under *R. hirtus*, I think, by Dr. Focke, and I am not prepared to question the determination (or suggestion?); but it is, of course, very strongly armed even for the stronger forms of that most variable species, while in *some* particulars it recalls our *R. cognatus* and forms of *R. hystrix*."—W. M. R.

R. hirtus, W. and K., a form. Near Treffos, Anglesey, August, 1895. JNO. E. GRIFFITH. "The glabrous angular (sometimes even sulcate) stem and deeply incised serrate leaves take this, I think, from *R. hirtus* and connect it with *R. Durotrigum*, R. P. Murray. The stem, no doubt, is often more sulcate here than in the Dorset *Durotrigum*, and perhaps usually more densely aciculate and with rather fewer gland-tipped organs; the leaves are mostly smaller, narrower, and hairier beneath, and the panicle more leafy upwards; but all the more marked features (and they are very striking) are common to the two plants, and the differences may well be due to locality, the exposed ground in Anglesey being exceedingly unlike the woodland habitat of the Dorset plant. *R. Durotrigum* has hitherto been found only in Dorset."—W. M. R.

R. hirtus, W. & K., var. *rubiginosus*, P. J. Muell., near Glasinfryn, Bangor, Carnarvonshire, August, 1895.—JNO. E. GRIFFITH. "Named by Dr. Focke; but these specimens are exceptionally weak and uncharacteristic, especially in some of the stem pieces."—W. M. R.

R. dumetorum, W. and N., var. *diversifolius* (Lindl.). Near Colwyn Bay, Denbighshire, July, 1895.—W. H. PAINTER. "Clearly *R. dumetorum*, and either a strong example of var. *diversifolius*, or a form intermediate between it and var. *ferox*, Weihe."—W. M. R.

R. corylifolius, Sm., var. *cyclophyllus*, Lindeb. Colwyn Bay, Denbighshire, July, 1895.—W. H. PAINTER. "Rightly named, I think, and, if so, new for the county; but the material is hardly such as to admit of a thoroughly satisfactory determination."—W. M. R.

R. Balfourianus, Blox., or *R. cyclophyllus*, Lindeb.? E. F. Linton. Hedge near Roxburgh, N. Roxburghshire, 17th July, 1894.—CHARLES BAILEY. "Neither in stem nor panicle, I think, does this beautiful plant quite agree with *R. Balfourianus*, though on the whole it seems nearer to that than to *R. cyclophyllus*."—W. M. R.

R. affinis, *Briggsianus* × *? incurvatus*, fide W. M. R. Llanfair, Merioneth, 8th Aug, 1895.—W. R. LINTON. "I suppose that the suggestion of a probable origin is as far as we can get here."—W.M.R.

R. Lindleianus × *radula*, E. F. Linton. Hedge in the cross lane from the Leazes to the high road to Hexham, S. Northumberland, 18th July, 1894,—CHARLES BAILEY. "The only feature which I see in the dried specimens unfavourable to Mr. Linton's suggestion is the tendency of the sepals to rise. In this instance, a positive determination is hardly possible from pieces collected so early in the season, even when so carefully selected and well pressed."—W. M. R.

Potentilla rupestris, L., seedlings, Hort. Croydon, 1894. Root from Craig Breidden, Montgomery.—AR. BENNETT.

P. argentea, L. On trap rock between Damory Bridge and Falfield, West Gloucester, 17th September, 18 New County record.—JAS. W. WHITE.

Alchemilla vulgaris—the three forms. Shirley and neighbourhood, May, 1895. "Of the three forms *A. filicaulis* is the usual plant of pastures, and is by far the most frequent in my neighbourhood, though none of the three is rare."—WM. R. LINTON.

A. vulgaris, L. var. *filicaulis*, (Buser). Meadows, Piercefield, Mon., 20th May, 1895.—W. A. SHOOLBRED. "Examples of the above *Alchemillas* have been sent to Dr. Buser, but I am at present without his reply."—W. H. Beeby.

Pyrus minima, Ley. Craig Cille, Breconshire, 4th June and 28th August, 1895.—AUGUSTIN LEY. "I sent Mr. Ley's interesting *Pyrus* to Dr. Conwentz, and he very kindly forwarded the specimens to Prof. Koehne, of Berlin, an authority on the Pomaceæ. His report is below" (translation): "The plant stands nearest to *Aria Mougeoti*, G. Beck (*Sorbus Mogeoti*, Soyer-Will. et Godr.), but has still smaller and narrower leaves, and apparently smaller flowers. Besides, the interior parts of the flowers and fruit present small differences in form which make it appear very likely that the plant represents a true species. Whether these differences are constant can only be proved by cultivation. It is very desirable that seeds of

this shrub should be distributed. Noteworthy, also, is the tendency of the veins on the underside of the leaves to become glabrous, a feature which does not seem to be present in the allied species."—E. KŒHNE. 24/2/96. Prof. Kœhne now considers this a hybrid between *Pyrus Aucuparia* and *P. intermedia*.—W. H. B. (See also 'Journ. Bot.' 1897, p. 99.

Rosa mollis, Smith; E. F. Linton. Roadside, Gladswood, on the banks of the Tweed, South Berwickshire, 13th July, 1894. Not recorded in "Topographical Botany" for County 81.—CHARLES BAILEY. "Cette forme présente, sur ses réceptacles, des soies glanduleuses aussi fortes et aussi nombreuses que dans le *R. pomifera*, Herrm."—Prof. Crépin.

R. mollis, Smith; W. M. Rogers. Hedge, Lower Derraid; also, bush outside the woods of Castle Grant, near Grantown-on-Spey, South Elgin, 22nd July, 1895. Not recorded for County 95 in "Topographical Botany."—CHARLES BAILEY.

R. mollis, Smith, var. *cærulea*, Woods; W. M. Rogers. On the banks of the River Spey, near the old churchyard, Inverallan, near Grantown, South Elgin, 20th July, 1895.—CHARLES BAILEY. "D'après les matériaux provenant d'Ecosse que je posséde en herbier, je ne crois pas que la teinte bleuâtre du feuillage corresponde toujours à l'absence plus ou moins complète de glandes sur les pédicelles et réceptacles. Il y a des variétés à feuillages bleuâtre qui possédent des pédicelles et réceptacles hispides-glanduleux."—Prof. Crépin.

R. tomentosa. Smith; E. F. Linton. Hedge in Glen Turret, 2nd October, 1894; roadside bush on the banks of the River Turret, 3rd October, 1894; and bush near the Hydro. on the Knock of Crieff; all in Mid. Perth. Not recorded for Vice-county 88 in 'Topographical Botany.'—CHARLES BAILEY. On the first plant Prof. Crépin remarks, "*R. tomentosa*, Sm., var.—Une partie des aiguillons sont droits, et resemblent à ceux de *R. mollis*, Sm."

R. tomentosa, Smith. W. M. Rogers. Lower Derraid, and high road through the woods of Castle Grant, 22nd July, 1895; west of railway, and in a field on the road from Grantown-on-Spey to Mid. Dreggie and Easter Gorton, 24th July, 1895; all four localities in South Elgin. Also, banks of the Caledonian Canal at Aberchalder, 18th July, 1895; and railway bank on the road from Speybridge to Côngash, near Grantown-on-Spey, Easterness, 26th July, 1895. Not recorded for vice-counties 95 and 96 in 'Topographical Botany.'—CHARLES BAILEY. "Cette forme présente quelques traits de ressemblance avec le *R. mollis*, Sm. Les stipules supérieures et les bractées sont assez dilatées."—Prof. Crépin. (This opinion refers to the plants from "high road through woods," from "west of railway," and from "field on the road from Grantown.")

R. rubiginosa, Linn. Foot of the Eildon Hills, 13th July, 1894, and near Lindean, 14th July, 1894; both localities in the neighbourhood of Melrose, North Roxburgh. Apparently wild, but the sweetbriar is largely planted in the district, and the bushes from which these specimens were taken may have been self-sown or bird-sown plants.—CHARLES BAILEY. Prof. Crépin makes no comment.

R. micrantha, Smith; W. M. Rogers. Lane on left of the road from Ruthin through Llanfwrog to Rhewl, Denbighshire, 30th September, 1895. Not recorded in 'Topographical Botany' for County 50.—CHARLES BAILEY. "R. *micrantha*, Sm. var."—Prof. Crépin.

R. glauca, Vill., var. *Lintoni*, Scheutz; E. F. Linton. Banks of the Tweed, near Melrose, north Roxburghshire, 12th July, 1894.—CHARLES BAILEY. "*R. coriifolia*, Fries! var. *Lintoni*, Scheutz. C'est par une simple inadvertance que M. Bailey à mis '*glauca*' pour '*coriifolia*.'"—Prof. F. Crépin. "Mr. Bailey has doubtless simply followed the 'Catalogue,' which ignores the primary sub-division into *glauca* and sub-sp. *coriifolia*; as a consequence, varieties of the latter get quoted as varieties of the former."—W. H. B.

R. sepium, Thuill., var. Near Colwyn Bay, Denbighshire.—W. H. PAINTER. "*R. tomentosa*, Sm., var."—Prof. Crépin.

R. stylosa, Desr., var. *pseudo-rusticana*, Crépin. Chetnole, Dorset, 22nd June, 1895. I send specimens of this well-marked rose from one of two new Dorset localities in which I have seen it in fair quantity in recent years, the other being the borders of Piddle Wood, near Sturminster Newton. I think it extremely probable that the form has been produced by hybridisation between *R. systyla*, Bast. and *R. arvensis*, Huds., though now in some districts (as in the Teign Valley, S. Devon) it is so abundant as to seem to propagate itself by seed. In the hundreds of luxuriant and abundantly flowering bushes that I have seen I can recall only a single flower that was not pure white, and that might merely have developed a pinkish tinge when fading. The flowers of *R. systyla* are usually pink, though occasionally of as pure a white as those of *R. arvensis*. In habit *R. pseudo-rusticana* is just intermediate between these two.—W. MOYLE ROGERS.

Ribes rubrum, L., var. *sylvestre* (Reichb.)? Hedge-row, Shirenewton, Monmouthshire, 20th May, 1895. This is far from uncommon in the woods here, especially on limestone, both in West Gloucestershire and Monmouthshire, and appears to be decidedly native. In the woods it flowers and fruits rather sparingly. The hedgerow from whence most of these specimens were gathered is close to an aboriginal wood—on the sandstone—and probably somewhat recently formed the border of it.—W. A. SHOOLBRED. "I suppose correct, though the racemes look as though they were sub-erect in flower."—Ar. Bennett.

Ribes petræum, Sm. Wilton, Egremont, Cumberland, 22nd May, 1895.—Joseph Adair, "Is it not better to adopt Syme's name *β. Smithianum*, as there is a *R. petræum*, Wulfen.; or perhaps var. *petræum*, Hooker, would be a prior name and the proper one. I can find no exact equivalent for this form in Continental Floras."—Ar. Bennett.

Myriophyllum verticillatum, form. Bog of Lynn, near Mullingar, 22nd July, 1895. Apparently checked in growth, owing probably to the extreme dryness of the early part of the season.—H. C. Levinge. "I should call it simply the mud state of the plant."—W.H.B.

Epilobium anagallidifolium × *obscurum*. Root from Ben More of Assynt, W. Sutherland, 1890. Garden, Milford, 15th June, 1895.—E. S. Marshall.

Apium nodiflorum, Reich., var. *ocreatum*, Bab., fide Ar. Bennett and E. S. Marshall. King's Cove, Arran, v.c. 100, 3rd July and 15th August, 1894.—Growing beside the type.—A. Somerville.

Œnanthe pimpinelloides, L. A characteristic plant of Milford-on-Sea, S. Hants, June, 1895.—J. Cosmo Melvill. "Yes."—A. R. Bennett.

Galium —— Root from Paddlesworth, E. Kent, 1894. Garden, Milford, 15th June and 3rd Sept., 1895. This is closely allied to *G. erectum* and *G. Mollugo*, but I think it to be distinct from both. The fruit (sparingly produced in cultivation) is smooth. Leaves bright green, rather thin. Habit weak and straggling. In the wild state it is smaller, and reminded me of *G. sylvestre*, Poll.—Edward S. Marshall. "Cultivation shows this plant to be intermediate between *G. Mollugo* and *G. erectum*, on the whole nearer the latter. Whether it be simply "one of the intermediates" such as Syme speaks of, or a hybrid, remains an open question. I have not seen *G. erectum* from the locality. The plant has not yet borne any fruit in my garden, nor have I seen any perfect fruit on the wild specimens."—W. H. Beeby.

G. Mollugo, Linn. var. No. 1. Meadows, Bray, Berkshire and Buckinghamshire, August, 1895. One of the puzzling intermediate forms between type *G. Mollugo* (*G. elatum*, Thuillier) and *G. erectum*. This may be referred to the var. *insubricum* (Gaudin, 'Fl. Helv.' i, p. 421). It must be borne in mind that these specimens occurred in a meadow which had been once mowed that year, so that they have grown laterally from the original stem in many instances. It may be remembered that Mr. Bolton King sent to the Ex. Club, some years since, from the meadows near Old Windsor, a *Galium* which Mr. H. C. Watson thought might be the *G. diffusum* of Hooker—the *G. cinereum* of Smith; Babington thought it was *G. erectum*, while Dr. Boswell considered it to be *G. Mollugo*, var. *Bakeri*. I have not seen Mr. King's specimen, so I am unable to say whether this is identical. —G. Claridge Druce.

G. Mollugo, var. Meadows, Bray, Berks and Bucks, August, 1895. No. 2. A *Galium* allied to the plants labelled No. 1 from the same locality. I have not seen specimens of *G. dumetorum*, Jordan, but from descriptions this must be rather closely allied. Some of the specimens are in fruit.—G. CLARIDGE DRUCE. "Neither of Mr. Druce's plants is quite the same as my specimen of Mr. Bolton King's plant referred to. There would appear to be a misconception somewhere among British authorities as to the name *insubricum*; all the plants that I have seen so named are decidedly narrow-leaved forms; but according to Syme the leaves of *insubricum* are broader and shorter in proportion than those of either of his other two varieties!"—W. H. B.

Inula salicina, Linn. Root from Lough Derg, Co. Galway; hort. Bournemouth, 3rd and 8th July, 1895. These specimens, though garden-grown, are scarcely different in appearance from the wild specimens from Lough Derg gathered, when the roots were procured, in 1885. The plant remains monocephalous with me almost invariably. EDWARD F. LINTON. A root of this very rare Irish plant was sent to me by Mr. E. F. Linton, who gathered it near Rossmore, on Lough Derg. This year the plant has flowered freely in my garden, 11th July, 1895.—H. C. LEVINGE.

I. Britannica, L. Shore of Cropstone Reservoir, Leicester, July, 1895. This species must be added in future to the British Flora. It is completely naturalised on the shore of the Cropstone Reservoir, near Leicester, having re-appeared this summer in greater abundance than last year and in greater vigour, many specimens being branched and bearing two or three flower-heads, whereas last year not one branched specimen was found. The site was under water in the winter for several months.—F. T. MOTT (leg. Rev. T. A. Preston). "It seems prudent to give the plant a rather longer trial before admitting it as a permanently naturalised plant."—W. H. B.

Xanthium spinosum, I. On dredgings from the Avon at Bristol October, 1885.—JAS. W. WHITE.

Centaurea nigra, L. f. Cwm Bychan, Merioneth, 13th August, 1895. The type, which was common in the district, rather suddenly gave way to the rayed form at alt. 600 feet about Cwm Bychan.—WM. R. LINTON.

Centaurea melitensis, L. On old colliery débris near Kingswood, West Gloucester, 5th October, 1885.—JAS. W. WHITE. "Correct. There are specimens of this plant in the Natural History Museum Herbarium, gathered on the banks of the Severn, Gloucestershire, in 1869."—E. G. Baker.

Crepis nicæensis, Balbis. Field near York, July, 1895.—GEORGE WEBSTER. "Mr. Webster sends this series to show the range of variation from 'peduncles nearly glabrous' to 'excessively glandular.'" —W. H. B.

Taraxacum officinale, var. *T. corniculatum*, DC. On limestone, near Shirley, Derby, May, 1895. This departs from *erythrospermum*, Andrz. in the achenes being pale with only a slight rufous tinge, and by the horns being for the most part strongly developed. Possibly, however, it may be a limestone form of the latter.—Wm. R. Linton.

T. officinale, var. Kniveton, Derby, May, 1895. On limestone débris. Inner phyllaries simple at the tip, outer not fully reflexed.—Wm. R. Linton. Messrs. Groves write:—"We have not made out these limestone forms of *Taraxacum*."

Hieracium callistophyllum, F. J. Hanb. Root from near Kingshouse, vice-county 98, Argyle. Garden, Milford, 5th June, 1895.—E. S. Marshall. "Yes."—F. J. Hanbury.

H. ——. Limestone scars on Ingleboro, July, 1895.—Geo. Webster. "These are all *H. anglicum*, Fr."—F. J. Hanbury.

H. murorum, L. pt. var. *cordigerum*, Norrlin. Scarp, Outer Hebrides, Scotland, September, 1894. Coll. W. S. Duncan. Com. Arthur Bennett. "These are all *H. anglicum*."—F. J. Hanbury.

H. anglicum, Fr. var. b. *acutifolium*, Backh. Basalt cliffs, Cave Hill, Belfast, 20th July, 1895 ("*H. anglicum*, Fr." for one specimen; the other indeterminable; either an *anglicum* form, or else "*H. iricum*, Fr.," F. J. Hanbury). Basaltic rocks, Sallagh Braes, Co. Antrim, 17th July, 1893. ("One sheet correct; the others var. d. *longibracteatum*," F. J. Hanbury). Basaltic cliffs, Agnew's Hill, Co. Antrim, 7th July, 1895. ("Correct."—F. J. Hanbury). The ten specimens I send are from three localities in a range of over twenty miles on the seaward escarpments of the basalt plateau of Co. Antrim. The leaf-dentition varies considerably, but they all seem to me referable to the above.—S. A. Stewart. "This parcel is much mixed. One sheet, retained by me, is no form of *H. anglicum* at all. The rest I have placed as above."—F. J. Hanbury.

H. murorum, L. Walton Craig, Keswick. Coll. Bolton King, 1879. Cultivated, 15th July, 1895.—C. E. Palmer. "These specimens are all *H. anglicum*, var. c. *jaculifolium*."—F. J. Hanbury.

H. clovense, Linton, var. b. *Griffithii*, F. J. Hanb. Nant Francon, August, 1894.—Jno. E. Griffith. "This is the plant described by me under the above name. But Mr. Linton has since pointed out to me strong reasons why it should not be united with *H. clovense*, with which I concur. The name had better stand, therefore, as simply *H. Griffithii*"—F. J. Hanbury.

H. Farrense, F. J. Hanb. Great Ormes Head, August, 1894.—Jno. E. Griffith. "These appear to me to be correctly named, but I feel sure the specimens are cultivated examples, and, if so, ought to be so described on the labels."—F. J. Hanbury.

H. rubicundum, F. J. Hanb. Near Ogwen Lake, August, 1894.—Jno. E. Griffith. "Correctly named, and fine typical specimens."—F. J. Hanbury.

H. britannicum, F. J. Hanb. Great Ormes Head, August, 1894.—Jno. E. Griffith, "*H. britannicum*, F. J. Hanb., as suggested in 'Botanical Ex. Club Report.' 1893, p. 418. They are not *H. stenolepis*, as shown by the shape and clothing of involucre and leaves. One or more of these sheets must contain cultivated specimens."—F. J. Hanbury.

H. Pictorum, Linton. Root from Ben Chaisteil, vice-county 98, Argyle, 1893. Garden, Milford, 2nd June, 1895. Styles yellow.—E. S. Marshall. "Yes."—F. J. Hanbury.

H. Originally from Kingshouse, vice-county 98, Argyle. Garden, Milford, 5th June, 1895. I have had this growing since 1888, when it was brought from the Clach Leathad mountain range, near Kingshouse; it is constant in character and comes true from seed. Though in some ways recalling *H. Pictorum*, Linton, it differs at a glance from that by the yellowish (not bluish) green colour of the leaves; these are firm, strongly veined, more or less hairy on the upper surfaces. Styles rather livid; ligules glabrous-tipped; involucres with many crisped white bulbous-based hairs. There is, I think, some superficial resemblance to *H. caesio-murorum*, Lindeberg.—Edward S. Marshall. "I am not prepared to name this form with any certainty, especially in the absence of any wild specimens."—F. J. Hanbury.

H. murorum, L., var. b. *pulcherrimum*, F. J. Hanb. Nant Francon, August, 1894.—Jno. E. Griffith. "These are correctly named."—F. J. Hanbury.

H. Great Orme's Head, North Wales, 31st May, 1895.—J. A. Wheldon. "These are closely allied to *H. murorum*, var. *pachyphyllum*, Purchas, and may, I think, be regarded as an exposed maritime state of the same. In this sheet there were two sheets of *H. lima*."—F. J. Hanbury.

H. euprepes, F. J. Hanb. Basaltic cliffs, Cave Hill, Belfast, June, 1893.—S. A. Stewart. "The specimens returned are all correctly named. The parcel included one specimen of either *H. vulgatum*, or *H. orarium*, Lindeb., and a doubtful scrap; the latter I have destroyed."—F. J. Hanbury.

H. insulare, F. J. Hanb., var. b. *petrocharis*, Linton. Originally from the western Breadalbanes, Perthshire, vice-county 88. Garden, Milford, 5th June, 1895. I have had this in cultivation since 1889, from the mountains near Crianlarich (precise locality not known), but have not yet got it definitely named. It seems very distinct, and varies little. Styles yellow; heads very grey with silky pubesence; leaves dull green and hairy on the upper surface. Mr. Hanbury and I,

having compared this with wild and cultivated authentic specimens of *petrocharis*, agree in thinking that it cannot be kept apart from that plant. (Feb. 5th, 1896).—EDWARD S. MARSHALL. "I agree."—F. J. Hanbury.

Hieracium vulgatum, Fries. On the banks of the River Spey in the neighbourhood of Inverallan, Grantown, South Elgin, 20th July, 1895. Not recorded in 'Topographical Botany,' ed. ii. for vice-county 95.—CHARLES BAILEY. "Yes."—J. F. Hanbury.

H. —— var.? Ingleton, Yorkshire, 31st July, 1895.—J. A. WHELDON. "Yes."—F. J. Hanbury.

H. Coal dust heaps, Camerton Collieries, Somersetshire, July, 1895.—C. E. PALMER. "*H. vulgatum*, var. c. *maculatum*, Sm.? or auct. angl.?"—F. J. Hanbury.

H. subanfractum, mihi. Originally from Perthshire, vice-county 88. Garden, Milford, 8th June, 1895.—E. S. MARSHALL. "Yes."—F. J. Hanbury.

H. duriceps, F. J. Hanb., var. b. *cravoniense*, F. J. H.? Ingleton, Yorkshire, 31st July, 1895.—J. A. WHELDON. "These specimens are all *H. sciaphilum*, Uechtritz. *H. duriceps*, var. *cravoniense*, F. J. Hanb., has stylose flowers in all the specimens I have seen both from Yorkshire and Lancashire."—F. J. Hanbury.

H. diaphanoides, Lindeb. Ingleton, Yorkshire, 31st July, 1895. J. A. WHELDON. "These are all weak specimens of *H. sciaphilum*, Uechtr."—F. J. Hanbury. ("Of the above *Hieracia*, Mr. Hanbury has seen all sent for distribution. With regard to the following, the Rev. Augustin Ley writes :—'Of the specimens sent, the only ones not seen by Mr. Hanbury are those of *H. vagense*,' and these have been grown from roots of plants which were seen by him in the wild state."—W. H. B.)

H. Leyi, F. J. Hanbury. Mountain cliffs, Brecon Beacons, 9th and 10th July, 1895. Name confirmed by Mr. Hanbury. Abundant at Craig Gledsiau ; not yet, I believe, found elsewhere in the Brecon Beacon district. On the old red sandstone.—AUGUSTIN LEY.

H. lasiophyllum, Koch., variety. Craig Cille, Breconshire, 4th June, 1895. "Not a variety. It agrees very well with the typical plant."—F. J. Hanbury. Abundant at this station, which is on the limestone. It has not been seen by me on the old red sandstone.—AUGUSTIN LEY.

H. britannicum, F. J. Hanb., var. *vagense*, F. J. H. Cult. Sellack, June, 1895, from Breconshire roots. This plant remains, so far as I see, unaltered by garden cultivation.—AUGUSTIN LEY.

H. euprepes, F. J. Hanb. Cliffs of the Brecon Beacons, 9th and 10th July, 1895. Name confirmed by Mr. Hanbury. Abundant both at Craig Gledsiau and other stations in this range. Only seen on the old red sandstone.—AUGUSTIN LEY.

H. ——? First thought by me, and assented to by Mr. Hanbury, as *H. Adlerzii*, Almq.; but seen afterwards by both of us to be different from this. Mr. Hanbury subsequently suggested *H. sciaphilum*, Uech., but if so, then surely a very marked variety, deserving a varietal name. Cliffs of the Brecon Beacon range, 9th and 10th July, 1895. Name confirmed by Mr. Hanbury. This is a beautiful and very distinct hawkweed, gathered by me at five different stations on the Beacon range, one of them on limestone, the rest on sandstone. Most abundant on a wooded cliff called Craig Du (sandstone).—AUGUSTIN LEY.

H. diaphanum, Fr., var. *cacuminum*, Ley. Cliffs, Brecon Beacon range, 9th and 10th July, 1895. Name confirmed by Mr. Hanbury. I have seen this plant in several new stations, both in the mountain cliffs and in the river valleys of the Brecon Beacons. I have the concurrence of Mr. Hanbury in suggesting that this plant should be removed from *H. diaphanum*, Fr., and placed as a variety under *H. argenteum*, Fr. After a good many years' careful observation of *H. cacuminum*, both as a wild plant and under cultivation, I believe this to be its natural position.—AUGUSTIN LEY.

H. rigidum, Hartm., var. *serpentinum*, F. J. Hanbury. Root from Hatterel hills, Herefordshire. Cult. Sellack, 2nd July, 1895. Passed by Mr. Hanbury. The plant loses most of its leaf spots, and becomes larger under cultivation.—AUGUSTIN LEY.

Campanula rotundifolia L., forma. Limestone, S. of Lough Mask, Co. Mayo, Ireland, 15th July, 1895. A pretty and distinct looking plant when growing. Mr. H. Groves writes to me:—"The lesson of these specimens seems to me that leaf characters are of very little value in this species. The larger specimens seem to answer fairly well to var. *lancifolia* of Mertens and Koch." To myself the question of size appears of small importance, depending as it does upon greater or less moisture, at any rate in the present case.—EDWARD S. MARSHALL. "Growing the various forms side by side, under equal conditions, seems to be the only means of really finding out whether they be merely states due to situation, or varieties. I suspect that a very considerable number of our catalogue varieties would, if subjected to this test, disappear from the lists of those who discriminate between the state and the variety. I have gathered similar forms in Surrey, near Haslemere, and elsewhere; but have doubted whether any are really varieties."—W. H. Beeby.

Moneses grandiflora, Gray. Rothiemurchus Forest, Easterness, under Scotch firs. June, 1892.—A. SOMERVILLE.

Statice auriculæfolia, Vahl. var. *intermedia*. Portland Isle, Dorset, July, 1895. How does this differ from *S. Dodartii*, Gir., which was recorded by Babington from the same place? Has the *S. Dodartii* been since found?—G. Claridge Druce. "Doubtless the plant intended by Syme, though the spikes are not as thick as many. As to its bearing Vahl's name, see 'Journal of Botany.'"—Ar. Bennett.

Syringa vulgaris, L. Near Egremont, Cumberland, July, 1895. The common lilac has established itself in hedges about 1½ miles east of Egremont very considerably. It forms the hedge for about twenty yards not far from Ulcoats Mill. Between Cote Close and Moss Dalts farms it occupies the hedges in many parts to the exclusion of the thorn for spaces of from five to twenty yards in length in different fields. It has the appearance of having been bird sown.—Joseph Adair. "Does it ripen seeds in Cumberland?"—W. H. B.

Erythræa Centaurium, Pers., forma. Damp sandy pasture near Lytham, West Lancashire, 6th August, 1895.—E. S. Marshall.

E. Centaurium, Pers. var. *capitata*, Koch. Pastures near the sea, Milford-on-Sea, S. Hants, June, 1895.—J. Cosmo Melvill.

Gentiana baltica, Murbeck? Sandhills between Lytham and St. Anne's, West Lancashire, 6th August, 1895.—E. S. Marshall. "Yes; but members will bear in mind that all the specimens do not show the root-leaves."—W. H. B.

G. germanica, Willd. A small-flowered form abundant in a chalk pit at North Sydmonton, Hampshire, this year, 21st September, 1896. The plants varied considerably in character, and in several cases there was a difficulty in distinguishing them from robust forms of *G. Amarella*, Linn.—A. B. Jackson. "I could not refer these specimens either to *G. germanica* or to *G. Amarella*, and as certain features suggested a hybrid origin I sent examples to Dr. von Wettstein, who, after closely examining the plant, agrees in thinking it a hybrid between the two above species. He arrives at this conclusion because:—'1. It is completely intermediate, morphologically, between the two species named. 2. The sterility of the pollen. I could, however, only examine one flower, as the others were going to seed. This one contained 48 % of abortive pollen-grains. 3. The small number of fully developed seeds. I examined three capsules, of which one contained 56 %, the second 97 %, and the third 88 % of evidently abortive seeds.' Dr. Wettstein adds that for a complete determination it would be necessary to know whether the plant grows in company with its putative parents. Mr. Jackson has promised to investigate this point, but I may mention that I have seen *G. germanica*, Willd., from the locality. (See 'Report' for 1892, p. 379.'"—W. H. Beeby.

Symphytum asperrimum, L. Brass Knocker Hill, Bath, June, 1894. I much wish to know if this plant, which I have met with in Jersey as well as at home, be correctly named. Two or three years ago

some specimens forwarded to the Club were said to be "typical *officinale*" which was an obvious error. The distinctive characters are :—corolla inflated, pure bright blue and white; leaves broad, abruptly narrowed below, and only slightly decurrent; stem bearing merely raised lines instead of prominent wings. The plant attains a height of from four to five feet on the dry border of a field. It agrees well with Curtis' figure of *S. asperrimum*.—Jas. W. White. "Not *S. asperrimum*, which has a small calyx with shorter and more obtuse segments, and stiffer prickle-like hairs. Probably a form of the variable half naturalized plant which has been referred to *S. peregrinum*, Ledeb., but some doubt attaches to this name."—H. and J. Groves.

Myosotis cæspitosa, Schultz. Ditch on the road from Speybridge to Congash, Grantown-on-Spey, Easterness, 26th July, 1895. Not recorded in 'Topographical Botany' for vice-county 96.—Charles Bailey.

Scrophularia aquatica, L. var. *cinerea*, Dum. Shore of Loch Deveragh, at Donore, Co. Westmeath, 13th Sept., 1895.—H. C. Levinge. "Yes; but is it not the common form all over Britain? I have never seen the other."—W. H. B.

Rhinanthus Crista-galli, L., var. *fallax*, Wimm. & Grab. Bog of Lynn, near Mullingar, 22nd July, 1895. New to Dist. vii., 'Cyb. Hibern.' Leg. E. S. Marshall.—H. C. Levinge. L. Owel, Co. Westmeath, 20th July, 1895.—W. R. Linton. Mr. Ar. Bennett remarks on both of these, "I think correct."

Melampyrum pratense, L. var., *ericetorum*, D. Oliver. Wybunbury Moss, Cheshire, 30th July, 1895.—Named from book descriptions; I have not seen a type specimen. Plant of a beautiful red-brown when fresh, hispid; corolla-tube whitish. A very marked variety, occurring here in great abundance; no other form was seen.—Edward S Marshall. "From the dried specimens we cannot see any reason for separating this from var. *montanum*."—H. & J. Groves.

Mentha longifolia, var. *nemorosa*. This plant was growing in abundance, spreading by its creeping root all over one end of an old orchard at the back of a small farmhouse near Woodhouse Eaves, Leicestershire, August, 1895. The species is rare in this county, and the var. *nemorosa* has not hitherto been recorded here. In a small garden, 30 yards distant, was growing *M. viridis*, but no other mint. The leaves when fresh were distinctly rugose, like those of *rotundifolia*, of which species I supposed it at first to be a variety.—F. T. Mott. "I suppose correct, according to our text-books; but I hardly think Strail would so name it."—Ar. Bennett. "I should not have thought that this plant quite accorded with any of our recognised varieties. Probably it is a descendant of the garden *M. viridis* referred to. On this point the late M. Lloyd records ('F. de l'Ouest,' ed. iv. p. 265) having raised *M. silvestris* from seeds of *M. viridis*, and adds, 'Further, with seeds of *M. silvestris* I have obtained typical glabrous *M. viridis*.'—W. H. Beeby."

Mentha piperita, Linn. Near Coed Parc, at the base of the débris on the north side of the Penrhyn slate quarries, north-east Carnarvonshire; in the company of Mr. John E. Griffith, 27th September, 1895.—Charles Bailey.

M. hirsuta, f. *paludosa*. W. side of L. Deraveragh, Co. Westmeath, 24th July, 1895.—W. R. Linton.

M. gentilis, L., var. *Wirtgeniana* (F. Schultz). Root from the Avon, above Aveton Gifford, S. Devon, 1894. Garden, Milford, 3rd September, 1895. This was the name suggested by Mr. Arthur Bennett in 1894.—Edward S. Marshall.

Galeopsis ochroleuca, Lam. Near Bangor, September, 1895.—J. E. Griffith.

Ballota nigra, Linn. A white-flowered form with pubescent foliage occurred near Compton, Berkshire, in July, 1895.—G. C. Druce.

Ballota nigra, Linn., var. *ruderalis*, Koch. On waste ground near Southampton Docks, S. Hampshire. Some tall plants of a *Ballota* attracted my attention from their rather larger and brighter coloured flowers. On examination they appeared to belong to this variety, although in not such an extreme form as the plant which I gathered in the Prater at Vienna. As to its being a native plant I am unable to say, for it was growing near the Docks, where a large quantity of casual plants, principally from Eastern Europe, occurred August, 1895. —G. C. Druce. "No doubt this is the plant of Koch having strongly acuminate calyx teeth, though not so extreme as Reichenbach's figure (Ic. 1218). Babington describes *B. ruderalis*, Sw., as 'very hairy and soft,' and *B. fœtida* as 'a hard, coarse plant,' but there does not seem to be any correlation between the two characters, as the present plant is hard and coarse, while Mr. Ley's Sellack plant (see 'Report,' 1887), with short cuspidate calyx teeth, is very soft and hairy. Koch gives the character of the calyx teeth only to distinguish his two varieties."—H. & J. Groves.

Ajuga pyramidalis, L. Ballyryan, Co. Clare, 15th May, 1895.—Leg. P. B. O'Kelly. Com.—H C. Levinge.

Plantago major, Linn., var. *microstachya*, Wallr., = var. *agrestis*, Wimm., = *P. minima*, DC. In sandy and cindery ground on the sea coast between Hightown and Altcar, on the banks of the river Alt, South-west Lancashire, 5th August, 1895. In other parts of the Lancashire coast, as at Southport, this form passes into var. b *intermedia*, Gilib.—Charles Bailey.

P. major, var. *intermedia*, Gilib. Growing in isolated patches of a square yard or more in extent, on the banks of the Cropstone Reservoir, six miles from Leicester, 26th September, 1895. These banks would be covered with water when the reservoir was quite full, but had been exposed all the summer, probably for six months. The

plant is new to this county. The form described in Syme's 'Eng. Bot.' as "*β. intermedia*, Decaisne," with "*P. intermedia*, Gilb.," as a synonym, seems to me to be only the common dry roadside form, with rosulate leaves and curved scapes, which is generally less luxuriant than the type, but not completely dwarfed.—F. T. Mott. "This appears to be the same plant as Mr. Bailey's var. *microstachya*, Wallr. I much fear that some of our *Plantago* varieties are merely *states*, and this remark applies to some of those I myself have formerly recorded from Shetland."—W. H. Beeby.

P. arenaria, Waldst. and Kit. On waste sandy ground at the back of the railway station, Hightown, South-west Lancashire, 3rd August, 1895. There were several other aliens on the same ground, as *Echinospermum Lappula*, Linn., *Potentilla hirta*, Linn., &c. Charles Bailey.

Illecebrum verticillatum, Linn. In a sandy situation near Wellington College, Berkshire, in considerable quantity over a limited area, September, 1895.—G. C. Druce. "A very interesting extension of range, bringing the plant close up to the Surrey border. Recorded by Mr. Druce in 'Journ. of Bot.,' 1891, p. 307." W. H. B.

Atriplex laciniata, L. Colwyn Bay, Denbighshire, July, 1895. New County record.—W. H. Painter. "The fruiting specimens are rightly named, but the flowering specimens belong to another species, probably *A. Babingtonii*."—W. H. B.

Suæda maritima, Dum. var. *procumbens*, Syme, (*fide* Ar. Bennett). On the shore, Loch Ranza, Arran, 25th August, 1894.—A. Somerville.

Polygonum.—Waste loamy ground, near Prestwich Clough, S. E. Lancashire, 26th July, 1895.—J. Cosmo Melvill. "*P. mite* Schrank, I believe; an addition to v. c. 59. This is interesting, as the name of the Cheshire plant was much contested; Mr. Hardy and Mr. Wilson contending it was *mite*, while Mr. Watson held it to be a large *minus*. Afterwards the true plant seems to have been gathered at Cotterill Clough. I think it was there that it occurred."—Ar. Bennett.

P. maculatum, Trimen and Dyer. Dried-up pond on Dunsfold Common, Surrey, 12th September, 1895.—E. S. Marshall. "I think merely *maculatum*; it varies so greatly, as all the species of this section do, that slight differences might be multiplied *ad libitum*."—Ar. Bennett. "I think it a condition due to environment, and not a variety at all—slight or otherwise."—W. H. Beeby.

Rumex crispus × *obtusifolius*. Knock Drin, Co. Westmeath, 27th July, 1895. Leg. W. R. Linton. com. H. C. Levinge. Also, same locality and date.—W. R. Linton. "I believe rightly named, but I should have liked to see more advanced specimens."—W. H. B.

Rumex obtusifolius × (*crispus*?) Thames side, between Walton and Weybridge, Surrey, 6th August, 1894.—W. H. Beeby. "From the appearance of the root leaves in early summer I formed the opinion that the plant would probably prove to be *R. obtusifolius* × *Hydrolapathum*. Dr. Focke, however, thinks not, and that the second parent is probably *R. crispus*, but reserves a final opinion until he has seen fully developed root leaves. In any case, it is not, I think, one of our usual forms of this hybrid, and for this reason I send a few specimens."—W. H. Beeby.

Euphorbia pseudo-Cyparissias, Jord. Cote Close, Egremont, Cumberland, 24th May, 1895.—J. Adair. "Yes."—H. & J. Groves.

Mercurialis perennis. Monœcious form, Cubley, Derby, and Shirley, Derby, May, 1895.—W. R. Linton. See 'Journ. Bot.,' 1895, p. 185. I found a good many plants of the male with a few female flowers; none of the other form.—W. R. Linton.

Salix decipiens, Hoffm. Kinson, Dorset, 13th April, 1894, and 24th Aug., 1895. From the same two trees from which came the specimens of No. 30, set of British willows (1894, &c.). I have seen no other from the south of England, and as yet have met with no specimens of the female. I prefer to label as above, feeling sure that *S. decipiens*, Hoffm. is not a mere variety of *S. fragilis*; and not being perfectly satisfied with the suggested solution that it is *S. fragilis* × *triandra*. There seems, however, no doubt that the late Dr. F. B. White was right in identifying it with *S. fragilis* var. *porcellanea* Bænitz.—Edward F. Linton.*

S. phylicifolia, Linn.; auct. Four forms are sent to illustrate this variable species, which have been grown in light soil at Bournemouth slightly improved by peat and refuse. These are No. 76 (♀) from Braemar, S. Aberdeen, a typical form, with grey pubescent capsules, and foliage, as usual, more glabrescent than in the wild state. No 38 (♀) from a rocky corrie near Clova, Forfar, has villous capsules, and a stigma that recalls the stigma of *S. Myrsinites*; but it is a pure *phylicifolia* form. No. 40 (♀) is a neat small-leaved *leiocarpa* form, brought from the side of the White Water, Clova, Forfar. Each of these maintains its distinctive features year by year. No. 16 (♂) came from the river side, Killin, Mid Perth, and may be considered typical as a lowland form of the species.—Edward F. Linton.

S. nigricans, Sm., form or (?) hybrid. Originally from Ben Lawers, Mid Perth; cult. Bournemouth, No. 137, 14th May and 26th June, 1895. There is good evidence of *S. Arbuscula* having entered into this willow, remotely; note the size, texture, and raised reticulation, and mitigated blackening of the leaf. Some of the foliage has kept a good

* Soon after writing the above note I discovered two low-growing trees of *S. decipiens*, Hoffm., at Parkstone, which is therefore a second station for Dorset, 3 or 4 miles from the Kinson one. These are, as usual, male.—Edward F. Linton.

green. The habit is also suggestive, the bush remaining dwarf (about 2 ft.) after four years, with horizontal and drooping branches, while the adjoining bush of *S. nigricans* × *phylicifolia* of the same date of planting (1891) is erect and 5-6 ft. high. As the catkins show no signs whatever of anything but *S. nigricans*, I merely issue it as a remarkable form.—EDWARD F. LINTON.

S. Myrsinites × *nigricans*, Wimmer. From a small bush in Glen Fiagh, Forfar. Hort. Bournemouth, No. 95, 19th April and 19th June, 1893. In this plant (which is given as No. 74 in our set of British Willows) the catkins shew hardly any signs of *S. Myrsinites*, which, however, is very apparent in the texture, veining, and cut of the leaves, and in their gloss in the living plant, which does not appear in these specimens.—EDWARD F. LINTON.

S. Myrsinites × *nigricans*, Wimmer. Glen Fiagh, Forfar, 24th July, 1894. As *S. punctata*, Wahl. is a somewhat doubtful name, owing to some mixture in Wahlenberg's specimens, it seems best to call this, as Wimmer did, *S. Myrsinites* × *nigricans*, a name which precedes by some years Andersson's *S. Wahlenbergii*. This example has the habit of *S. Myrsinites*, and this parent is visible in the texture, veining, gloss and shape of the leaves, and in the short pedicel of the ovaries and their style. The dense clothing of the ovaries, the scales, and a certain colouring, and blackening and hairiness of the leaves, give good evidence of *S. nigricans*.—E. F. LINTON.

S. aurita × *Lapponum*, Wimmer. The male bush from Coire Ardran, Mid Perth, where there was a strong growth of it in 1891; the female from wet rocks on the Glen Lyon side of Ben Lawers; both cultivated at Bournemouth, April, June (and July), 1895.—EDWARD F. LINTON.

S. Myrsinites, L., forma. From Glen Fiagh, Forfar; Hort. Bournemouth No. 47, May and July, 1891-93. A peculiar form (sent out as No. 73 set of British Willows) which I have only met with in Glen Fiagh. The male plant (of which specimens are now sent) my brother and I have had in cultivation for five or six years, and it maintains the habit of *Myrsinites*. It corresponds with the description of var. *arbutifolia*, Syme, of which I have seen no authentic specimen. We have suspected the presence of *S. nigricans* on account of the large size and greater flaccidity of the leaves, and the unusual development of stipules, which are seldom so large in *S. Myrsinites*; but the leaves do not blacken in carefully dried specimens, and there is so little definite proof of the suggested hybridity that we issue this plant as labelled.—EDWARD F. LINTON.

S. sesquitertia, F. B. White (*S. aurita* × *phylicifolia* × *purpurea*). Cuttings from the original bush from which the hybrid was named, near Thornhill, Dumfrieshire, were kindly supplied me by its discoverer, Mr. Jas. Fingland; hort., Bournemouth, 30th April and 28th June,

1895. As wild specimens of this hybrid are likely to be very scarce, I send some which, grown in light soil, are almost indistinguishable from the wild specimens in my possession.—EDWARD F. LINTON.

Ceratophyllum demersum, L. In fruit, Loch Derravaragh, Co. Westmeath, 24th July, 1895.—W. R. LINTON. I venture to send a couple of sheets of this, as it is rare to find it in fruit, and some members may be glad of it.—W. R. Linton. "I should have said rudiments of fruit, rather than fruit, and from habit should have named this specimen *C. submersum*. Unless the fruit is ripe it is utterly impossible to name the forms, as the change from young to ripe fruit is accompanied by corresponding changes in the spines, etc." —Ar. Bennett.

Iris fœtidissima, L. var. *citrina*, Syme. Swanage, Dorset, 6th July, 1895. A well marked and apparently quite stable colour-variety, of a particularly clear and pure, though not a deep or brilliant shade of yellow. My father, the Rev. Lester Lester, knew three stations for it in Purbeck 30 years ago. I searched all three carefully this year, but failed to find it. I was fortunate enough, however, to discover two isolated plants this summer, in widely-distant stations where he had never seen it. One of these formed a fine strong clump, and furnished almost all the specimens which I send. Is this variety known from any other locality except the east end of the Isle of Purbeck?—L. V. LESTER. "Syme (E.B. iii.) mentions it as occurring in the Isle of Wight where, according to Townsend's 'Flora of Hampshire,' it is found in North Wight (Dr. Bromfield) and South Wight (Mr. F. Stratton)."—W. H. B.

Simethis bicolor, Kunth. Branksome Park, Dorset, 28th June, 1894; 28th May and 19th June, 1895. In this, its one known English locality, this plant is probably as abundant as it has ever been, though confined to a few square yards in a fir-wood of miles extent.—W. MOYLE ROGERS.

Juncus ——. An intermediate between *J. compressus* and *J. Gerardi*. Damp sand on the shore of the Bristol Channel, at Berrow, North Somerset, August, 1887.—JAS. W. WHITE.

J. tenuis, Willd. Between Bridge of Weir and Kilmalcolm, Renfrewshire, on roadside turf, Sept., 1895.—A. SOMERVILLE.

Potamogeton sparganiifolius, Laestad. River Maam, Co. Galway, 5th July, 1895.—W. A. SHOOLBRED. "I doubt much this being the true plant of Laestadius, notwithstanding the late Prof. Babington's opinion that it was (cf. 'Journal of Botany,' 228, 1872) so. My specimens, gathered by Laestadius himself, differ in many points; and I think we must, anyhow at present, use Syme's name—*P. Kirkii*, until a careful study of the plants *in situ* is made. In his 'Loca. parallela plant.' in a note on *sparganiifolius*, Laestadius observes,

"Sparganio natanti e longinquo simillimus. Folia natantia sæpe desunt, tumque nemo sane divinaret, tam propinquam esse P. natanti, ut dubium sit an ex illo tuto separari possit." p 242 (1839)."—Ar. Bennett. "This resembles the Scandinavian plant in the submerged leaves, but differs in the branched stem and in the shape and areolation of the floating leaves; it might be placed under *P. fluitans* as a variety, but I would prefer to name it *P. Kirkii*, Syme. Possibly it may be *polygonifolius* × *natans*."—A. Fryer.

Potamogeton undulatus, Wolf. = *P. perfoliatus* × *crispus*. Sixmile River, above Templepatrick, Co. Antrim, 10th Aug., 1894. Grows in dense masses in the deeper parts of the river, with abundant fruiting spikes, but no fertile drupes. In shallows of a tributary stream it creeps amongst stones, but in that situation produces only leaves.—S. A. Stewart.—"I have no doubt that Mr. Fryer would so name these."—Ar. Bennett. "There is a considerable degree of uncertainty as to the precise form which Wolfgang described as *P. undulatus*. On such evidence as I have been able to obtain it seems probable that original specimens gathered and named by him are in part *P. prælongus* × *crispus*, and in part *P. crispus* × *perfoliatus*. M. J. Baagöe has examined the typical specimen in the St. Petersburgh herbarium, and assures me that this is *crispus* × *prælongus*; a specimen in my herbarium, gathered by Wolfgang, seems to me to be the same as the Stirling plant collected by Messrs. Bidston and Stirling, which is certainly *crispus* × *perfoliatus*. Mr. Baagöe inclines to think that none of our British specimens equal Wolfgang's plant, and has sent me drawings of stem sections of the type and of my var. *Cooperi*, and of the supposed parents of the two forms, which strongly support his views. I think Mr. Stewart's plant is equal to my var. *Cooperi*, and perhaps had better be named *Potamogeton* × *Cooperi* = *crispus* × *perfoliatus*."—A. Fryer.

P. Friesii, Rupr. Lord Longford's boat-harbour, Loch Derravaragh, Co. Westmeath, 24th July, 1895.—H. C. Levinge. Loch Derravaragh, Co. Westmeath, 24th July, 1895.—W. R. Linton. "Deep water state, correct. These are fair examples of Ruprecht's plant, except that his specimens were gathered in shallower water."—Ar. Bennett.

P. Friesii, Rupr. Derby, June, 1895. I think a County record; at all events a new locality.—W. R. Linton. "Probably correct, but poor material."—Ar. Bennett.

P. trichoides, Cham., var. *Trimmeri*, Caspary. Bradmere Pool, Drewsteignton, S. Devon, 28th July, 1895. (Conf. 'Journ. Bot.,' 1894, p. 23.)—S. T. Dunn. "Not showing the form of the fruit at all well. The original gathering is undoubtedly *P. trichoides;* this is perhaps gathered too early; it fruits up to November in Norfolk."—Ar. Bennett.

Ruppia rostellata, Koch. Pool at head of sands of Northtown, S. Harris, Outer Hebrides, 4th October, 1892. Leg. W. S. Duncan, Com. Ar. Bennett. New County record.

Scirpus cernuus, Vahl., var. *pygmæus* (Kunth). Purfield, near Swanage, Dorset, 9th July, 1895, and Holes Bay, Poole Harbour, Dorset, 12th July, 1895.—LESTER V. LESTER.

Rynchospora fusca, R. and S. Landford Common, South Wilts., 15th July, 1892, by E. J. Tatum. Com. AR. BENNETT. New County record.

Carex dioica, L. Shore of Loch Derravaragh at Donore, Co. Westmeath, 28th May, 1895. I send a few sheets of this in a young state, hoping it may be acceptable to members.—H. C. LEVINGE.

C. paradoxa, Willd. Bog of Lynn, near Mullingar, 14th June, 1895. Having met with some fine plants of typical *Carex paradoxa*, I venture to send a few good specimens.—H. C. LEVINGE.

C. fusca, Allioni, (*C. Buxbaumii*). Arisaig, Westerness, Co. 97, July, 1895. Leg. W. F. Miller, Com. A. BENNETT.

C. elata, Allioni, Fl. Pedem., ii, p. 272, 1785 (not of Lowe, 'Fl. Maderia'). Sandhurst, Berks., June, 1895. In the ninth edition of the 'London Catalogue,' this plant is included under the name of *C. Hudsonii*, A. Bennett. It is the *C. stricta*, Goodenough, in 'Trans. Linn. Soc.,' ii, p. 196, 1792 (not of Lamarck). I do not think an example of Allioni's plant exists, but most botanists who have gone into the question appear to think the *C. elata* of Allioni is identical with our *stricta*. Even if it were not, the coining of a new name does not appear to be necessary, since the name *C. melanochloros*, of Thuillier, 'Fl. Par.' 448, 1790, would have precedence if Allioni's name prove untenable. This plant occured on the margin of the lake, near the Staff College, Sandhurst, Berkshire, in June last. It is not quite typical, being smaller than any specimens I have previously seen in Britain. On the continent I have seen similar forms. It grew with a pretty form of *C. Goodenowii* and *C. canescens*.—G. CLARIDGE DRUCE. "The margins of the leaves are distinctly involute, so that it cannot belong to the *stricta* section."—W. H. Beeby. "I should have called this a form of *C. Goodenowii*. As to the proposed name, Mr. Druce has doubtless convinced himself by seeing a specimen of *C. melanochloros*, as he considers it the same as Goodenough's *C. stricta;* I have not, hence I do not accept it. As to Allioni's *C. elata*, there is good reason to suppose it was an *acuta* form, hence I do not accept *that*. Mr. Druce's way of putting supposed facts causes one to speak much more dogmatically than one could wish; but until it is recognised that *mere synonymy* will not do, it must be so met."—Ar. Bennett.

C. turfosa, Fries. Hedge Court Mill-pond, Surrey, 21st June, 1885, and 11th July, 1886.—W. H. BEEBY. This plant has been under observation at various times since 1885. In that year I gathered a few examples, attention having been drawn to it by its distinct appearance among the abundant *C. Goodenowii*. These were

considered by Dr. Almquist to be "*C. stricta*, var. probably?" Subsequently I met with the plant in immense masses, and a series was sent to Dr. Almquist in 1887, who then reported as follows:—"From the revolute margins of the dried leaves this form is to be referred to *C. stricta;* the fruit and habit, calling to mind *C. Goodenoughii*, indicate the var. *turfosa* (Fries. p.p.), Almq. But it is very remarkable that, although cæspitose, the fibrillæ are wanting; at least I have only seen them in solitary examples." It is further suggested whether it does not pass into *C. stricta*, or whether it may be a hybrid between it and *C. Goodenowii*. Both queries must be answered in the negative, as *C. Hudsonii* certainly does not occur in the locality. Mr. Alfred Fryer having carefully studied the plant, and pronounced in favour of *C. Hudsonii* (in the aggregate sense), I finally, last year, submitted further examples to Mr. Arthur Bennett, from whom, up to that time, I had not received any definite opinion. He kindly went fully into the matter, and reported:—"Looking at all these Surrey specimens, and at others so named from Ireland and Cambridge, and also my continental specimens, I do not see how to name them otherwise than *C. turfosa*, Fries, it being understood that I use the name in the same sense as Andersson." It only remains to add that the specimens collected early (16th May, 1887) show the filamentous network to the leaves quite distinctly, but that it seems to disappear later when the fruit is ripe. Although, as mentioned above, this plant grows in masses. it does not produce real tussocks like typical *C. Hudsonii*, and an occasional sobole is found. I must apologise for the length of this note, but the plant, besides being a very critical form, is of some local interest, inasmuch as it is the only representative of the group *Cæspitosæ* known to occur in Surrey.—W. H. Beeby.

C. aquatilis, L., var. *elatior*, Bab. Maam, Co. Galway, Ireland, 3rd July, 1895.—E. S. Marshall. "In this the glumes are short for *elatior*, and show an approach to the var. *virescens*, Anders.; but it is best referred to Babington's plant."—Ar. Bennett.

C. flacca, Schreb. Hispid-fruited form, limestone near Clonbur, Cos. Mayo and Galway, Ireland, 8th July, 1895.—E. S. Marshall. Extremely abundant to the south of Lough Mask. Probably a frequent form on limestone. Koch describes *C. glauca* as "fructibus scabriusculis," and Babington says: "fr. slightly rough;" but this form goes a good deal further, so that "glabrous" becomes a misnomer.—Edward S. Marshall.

C. fulva, Good., var. *Hornschuchiana*, Bab. Drinmore, Knock Drin, Co. Westmeath, 3rd July, 1895.—H. C. Levinge. "To me the specific and varietal names are synonyms. Surely it is an injustice to ascribe this variety to the late Prof. Babington? If his name be used at all in this connection should it not be as 'Bab. olim' rather than 'Bab?' It is true that Syme separates them; but he does so avowedly out of compliment to Smith, and shows con-

clusively that they ought not to be separated. My own opinion, however, is founded on my experience of the wild plant."—W. H. Beeby.

Carex flava × *fulva*. Maam, Co. Galway, Ireland, 5th July, 1895.—E. S. Marshall.

C. rostrata, Stokes. Broad-leaved form or variety, near Cong, Co. Galway, Ireland, 16th July, 1895.—E. S. Marshall. "A luxuriant plant, somewhat recalling the figure of *C. rhyncophysa* in 'Journal of Botany' for 1893. What appears to me to be the same thing, from Co. Westmeath, has been named by Mr. Arthur Bennett—*C. ampullacea* forma *planifolia*, Norman, 'Fl. Arct. Norvegiæ.'"—Edward S. Marshall. "Accords with Norman's plant fairly well, but the leaves are not so broad or so flat when dry."—Arthur Bennett."

C. involuta, Bab.? Wybunbury Moss, Cheshire, 30th July, 1895.—E. S. Marshall. I am not sure that this is the true plant, of which I do not possess any specimens. The friend who directed me to it used, however, to be familiar with that in the Hale Moss locality, which appears to have been drained. Very different, in a living state, from ordinary *C. rostrata*; growing in very swampy ground, among *Sphagnum*, in abundance.—Edward S. Marshall. "This may be Babington's plant, but I have seen no specimen named by that author; if so, I consider that Syme rightly considers it nearest to *C. ampullacea*."—Ar. Bennett.

C. vesicaria, L., form. Boggy ground, Meall Ghaordie, Mid Perth, about 2,500 feet, 13th August, 1891. This appears somewhat intermediate between *C. vesicaria* and *C. ampullacea*, resembling the latter species in the less strongly ribbed fruit narrowing more abruptly into the beak, and in the smoother and less angular stem.—H. & J. Groves. "To me this is the plant called γ *alpigena* by Fries and Andersson in 'Nya Botaniska Notiser,' 1850. Nyman refers this to *C. pulla*, Good., but Fries and Andersson, as well as Laestadius ('Loca Parall.' 1839) kept them distinct, and I think rightly, that is as a var. or form of *vesicaria*, and not of *pulla*. Doubtless it is one of the forms that lend themselves to those who combine *pulla* and *vesicaria*."—Ar. Bennett.

Alopecurus utriculatus, Pers. Meadow, near Oxford, 13th July, 1895. This grass was growing in fair quantity in a meadow in the neighbourhood of Oxford, in May, 1895. It was not an isolated patch, but thinly scattered about over a space of about 150 yards, and apparently well established. On enquiry from the farmer who occupies the land it proved that he had used a great deal of foreign hay in the year 1893, when the English hay crop almost entirely failed owing to the drought. The seeds which became separated in the process of chaff-cutting were scattered about the field in question to improve the next year's crop. The hay was said to have come from Canada. In many of the spikes the lower spikelets had become

fleshy and semi-transparent. I do not know whether this *Alopecurus* is an indigenous Canadian grass ; if not, it is a remarkable instance of a plant having twice crossed the Atlantic, and become established through human agency—in one case, if not in both, unintentionally.—L. V. Lester. "Correctly named."—E. Hackel. "This is a plant of continental Europe, and is not recorded by Macoun as yet introduced to Canada."—W. H. B.

Agrostis canina, L. Stoloniferous form, Loch Drin, Co. Westmeath, 28th July, 1895.—W. R. Linton. "Var. *mutica*, Gaud. *A. canina*, L. is always more or less stoloniferous ; in sandy soil the stolons are longer, in heavy soil short or almost suppressed."—E. Hackel.

Weingaertneria canescens, Bernh. Sand dunes by the sea, between Morar River and Arisaig, Scotland, July, 1895.—Fredk. Townsend. —"The occurrence of this plant in the above locality, which comes within v.c. Westerness, naturally suggested some enquiry into its recorded occurrence in Ayrshire. So far as I have been able to trace, it is first mentioned by Watson for the latter county in 'Top. Bot.' Ed. 1, 1874, where it appears in square brackets. Doubtless this record was obtained from the 'Botany of Ayrshire' (1872), a list which I have been able to consult through the kindness of Mr. A. Somerville. The record there given is "Dalrymple and Coylton ; James Smith in 'New Statistical Account of Scotland.'" The Rev. David Landsborough (in litt. to A. Somerville, 10th December, 1895) writes as follows :—"List furnished to 'New Stat. Acc.' by James Smith in 1837.—He was in regular correspondence with Sir W. Hooker. J. S. also furnished list of plants of Parish of Maybole ; all the plants in Maybole list are I believe correct, except *Vicia sylvatica* which is written *Lathyrus*—doubtless a clerical error, as former plant occurs in abundance in locality given." The Rev. D. A. Boyd writes (in litt. to Ar. S. 10th Dec., 1895)—"Smith's parishes are both inland rural parishes, with neither large towns, ballast heaps, nor tracts of sea shore." This is all that I have been able to learn concerning the Ayrshire record. In the course of these enquiries it came incidentally before me that *Elymus* and other grasses had several times been sown on the sands about Arisaig ; and although Mr. Somerville, Mr. Symers M. Macvicar and others used their best endeavours to ascertain the truth respecting the *Weignaertneria*, the question of its nativity was still a matter of doubt until Mr. Townsend finally ascertained that it had been sown by Mr. Eneas R. Macdonell, of Morar, who states (in litt. to F. Townsend, 31st May, 1896).—"The fact of discovering the plant at Toigall has recalled facts to my memory which leave no doubt on my mind that the *Weinguertneria* is not indigenous, but was introduced direct here, and not by accidental admixture." Mr. Townsend informs me that the grass occurs in plenty on the sand-hills, and it is somewhat disappointing that we cannot claim it as a native here, especially as it is said to occur in Norway in a slightly higher

latitude. Although I have given some details of the Ayrshire record, there does not now appear to be any particular reason to expect that it will be confirmed."—W. H. Beeby.

Kœleria cristata, Pers., var. *gracilis*, (Boreau). Sandy banks, Walton-on-Thames, Surrey, 9th July, 1895.—W. H. Beeby. "Correctly named."—E. Hackel.

Catabrosa aquatica, Beauv. b. *littoralis*, Parn. Machrie Bay, Arran, on moist shore sand, 21st July, 1894.—A. Somerville. "We get a similar form in Shetland, on moist sands by the sea. I have always regarded it as a state due to environment, and not a variety."—W. H. Beeby. To this Professor Hackel replies: "This is only a state, not a variety, of this very polymorphous plant. I have not at hand Parnell's description, but var. *minor*, Bab. = var. *subtilis*, Hook. refers to the uniflorous state, while most of the spikelets in your specimen are biflorous. There is also a var. *littoralis*, Kittel, 'Taschenb. d. deutsch. Fl.' Ed. iii., p. 102 (1844) with 'decumbent stems, and short, thick panicles' (without reference to the number of flowers in the spikelet) which seems to be the same as your plant."

Poa nemoralis, *L.*, var. *rigidula*. Brecon Beacon, July, 1895. Cult., garden; root from Brecon Beacon, 12th July, 1895. I owe the varietal name to Mr. Arthur Bennett. The cultivated plant I send for comparison, and to show what it becomes after about four years in garden soil.—Augustin Ley. "If this were once the var. *rigidula* in the wild state, it has now become genuine *P. nemoralis* by cultivation."—E. Hackel.

Bromus Lloydianus. Grassy cliffs by the sea, Milford-on-Sea and Barton, S. Hants., June, 1895.—J. Cosmo Melvill. "*B. molliformis*, Lloyd = *B. Lloydianus*, Gren. and Godr., can only be identified on *ripe* specimens, the awn diverging in the fruiting state, not in flower. The habit of your plant is indeed that of *B. molliformis*."—E. Hackel.

Bromus interruptus, G. C. Druce = *B. mollis*, var. *interruptus*, Hackel. Elsfield, Oxford, 30th May, 1895.—Mr. G. C. Druce has raised this plant to the rank of a species in the 'Journal of Botany,' 1895, p. 344, and has promised a fuller account of it in a future number. I found large quantities of it, evidently sown with a form of *B. commutatus*, in a dry sandy field at Elsfield, near Oxford, in May, 1895, where it flourished amazingly, in spite of intense drought. The interrupted panicle at once attached my attention. The plant had a very distinct appearance when growing, and close examination showed that the palea is divided almost to the base into two narrow lanceolate segments. This I pointed out to Mr. Druce, who found it to be the case with all the specimens which he examined, though they were derived from several distinct sources. His detailed account of it will be awaited with interest.—L. V. Lester.

Bromus interruptus, Druce. This plant was first distributed through this Club in 1888, to which I had sent it as a new variety of *B. mollis*, under the name *aggregata*, but Prof. Hackel, to whom a specimen had been sent, suggested the better name of *interruptus*, to which I readily acceded. He diagnosed it as follows :—"*B. mollis*, var. *interruptus*, mihi (Hackel). Panicula brevis, interrupta, spiculis glomeratis, obovato-ellipticis, gluma sterili superiore dimidiam spiculam æquante vel superanti." For the last seven years I have had the plant under my observation. I find it comes true from seed. It is by no means confined to the chalky field where I first found it, but it is found over a considerable area, not only on the chalk, but also on the green sand and coaralline oolite. Recently Mr. L. Lester, of S. John's College, Oxford, directed my attention to some specimens which he had collected at Elsfield, near Oxford (and of which I believe members will also receive a supply), which had the inner pale split to the base. I had previously come to the conclusion that the plant was a distinct species, but I considered its claims to specific distinction would be considerably strengthened if this character proved constant. I thefore examined my original gathering, and such other specimens as I possessed, and I found without exception the split pale. This character is not only true of mature specimens, but also of plants in flower, so that the splitting is not due to the rupture of the pale during the ripening of the caryopsis. Moreover, in *B. interruptus*, the fruit is somewhat shorter, darker in colour, with a more conspicuous groove, and the two divisions of the pale are either free, or sometimes adherent to the *margin* of the fruit, usually they are shorter (sometimes only half the length) of the glume, but occasionally they are as much as seven-eighths. They are frequently glabrous, but sometimes the two ribs are fringed with cilia as in *B. mollis*. In *B. mollis* the pale is only slightly emarginate, but the hyaline tissue at the apex is fringed. In fruit *B. mollis* has the pale closely pressed against the face of the seed to which it becomes adherent to a slight extent, or at any rate not easily separable in the dry state, the glume is slightly narrower than the seed, so that the margin of the grain can be seen. My friend, Mr. Tufnail, like myself, became convinced from what he had seen of it in cultivation that it was distinct before he was made acquainted with the character of the split palea. He tells me he has no difficulty in picking out one grain from another in a mixed sample. The most striking feature of this plant is the inflorescence, which differs from all other species of *Bromus* known to me in that single short, stiff, pedicels arise alternately right and left of the main rachis, each bearing at its apex 3-5 sessile, or in some cases shortly-stalked, spikelets. To this fact is due the peculiar and strikingly interrupted and compact appearance of the whole inflorescence which is made up of clustered groups of 3-5 erect spikelets. This peculiar feature does not obtain in its nearest allies, since in them 4-5 slender pedicels of various lengths arise at the level on the rachis, each bearing one or two, rarely more, spikelets, hence the inflorescence in these is more loosely continuous. As will be seen its alliance is essentially with *mollis*, since the large or inner glume extends half way to the apex of the

sixth floret, not to the fourth, as in *racemosus* and *commutatus*. *B. interruptus* is further distinguished from *B. mollis* by its usually greater height, by its more biennial growth, and by its narrow, strict, interrupted panicle of erect spikelets, of which some are not unfrequently compound. I may say that I have examined several hundred specimens of the genus *Bromus*, but have not found any specimens with the split palea, except those which have the inflorescence of *B. interruptus*. The specimen in my possession, which was gathered by Capt. Wolley-Dod in East Kent, and distributed through the Exchange Club in 1893 as *B. mollis*, var. *interruptus* (but which Prof. Hackel, reporting on the specimen sent to him, named *B. mollis* only), is, so far as my specimen goes, undoubtedly *B. interruptus*, of which I find it has the split pale and inflorescence. In conclusion I may state that *B. interruptus*, while more frequently found growing with *B. commutatus*, also occurs with typical *B. mollis*, and with *B. mollis*, var. *glabrescens*, so that the characters cannot be owing to any peculiarity of soil. That it can be only a sport is to some extent negatived by its wide distribution, as I have seen it from Oxfordshire, Berkshire, Buckinghamshire, W. Kent and Norfolk, while Mr. Tufnail has seen it near Lowestoft in Suffolk, and from Lincolnshire. Prof. Hackel, while confirming my observations in the main point, hesitates to draw the same conclusion from them. He considers that the palea is in a reduced state, and possibly not a constant character. It is only fair to say that Prof. Hackel has only seen a limited series of *B. interruptus*.—G. Claridge Druce. P.S—It may be well to add that none of the specimens of *Bromus interruptus* which are now sent have been examined for the character of the split palea, but were collected before that character had been made known. It will be well therefore if members will check them. If it be found, as I expect it will, that the character derived from the split palea is constant, I think they will be more convinced of the distinctness of the two species.—G. C. Druce. "Is not this a monstrosity rather than a species? Is it not probable that both the split palea and greatly shortened panicle branches are due to the arrested growth of certain parts, the cause in each case being the same and yet to be sought?"—W. H. Beeby. Professor Hackel replies: "I have not yet decided if I am to regard this as a species or an anomalous form of *B. mollis*. The split palea is anomalous in the whole genus, so that I believe this form to have originated from some abnormal state. But it shows a tendency to become constant! Next summer I shall cultivate it on a larger scale, and observe it closely." "Yes; Dr. Stapf and Mr. Rendle considered this a monstrosity rather than a species. The plant collected at Dartford by Capt. Wolley-Dod, distributed among the B. E. Club, 1893 plants, which was referred to by Prof. Hackel as 'common *B. mollis*,' agrees with Mr. Druce's plant in having the split palea."—H. and J. Groves.

Elymus arenarius, L. Sandy shores below Highcliffe, Barton S. Hants, 25th June, 1895.—The only specimen I have. Sent, as I

do not think it has been before recorded for Hants.—J. Cosmo Melvill. "Recorded for Hants S. in 'Bot. Loc. Record Club Report' 1884-86, and in 'Journ. Bot.' 1886, p. 284."—A. Bennett.

Ceterach officinarum, Willd., var. *crenatum*, Milde. Near Ballyvaughan, Co. Clare, June 1895.—Leg. P. B. O'Kelly. Com. H. C. Levinge.

Lastræa cristata, Presl. Oxton Bog, Notts. Leg. Dr. John Percy, F.R.S., 1837-38. Com. J. Cosmo Melvill.—Some three years ago I purchased a large portion of the botanical collections of the late Dr. John Percy, F.R.S. Among them are a considerable number of specimens of *Lastræa cristata*, Presl, from Oxton Bog, long since drained. As this fern is becoming every year more and more rare, and will soon be quite extinct in this country (for instance in 1878 I only noticed three clumps of it at Wybunbury, in Cheshire) I have much pleasure in sending several sheets for distribution among the members.—J. Cosmo Melvill.

L uliginosa, Newm.? Wybunbury Moss, Cheshire, 30th July, 1895.—E. S. Marshall. "I think *L. spinulosa*, and I do not see how it differs from some of our Surrey heath forms of that species."—W. H. Beeby. "We think you are quite right in referring this to *L. spinulosa*."—H. and J. Groves.

Chara aspera, Willd. L. Owel, Co. Westmeath, 20th July, 1895.—W. R. Linton. "A characteristic Irish form with fasciculate spine-cells."—H. and J. Groves. Brittas Lake, Knock Drin, Co. Westmeath, 22nd July, 1895. A large lake form; abundant, covering the bottom in several places.—W. R. Linton. "Correct."—H. and J. Groves.

C. contraria, Kuetz. L. Owel, Co. Westmeath, 20th July, 1895. W. R. Linton. "Yes; but specimens very poor."—H. and J. Groves. Brittas Lake, Knock Drin, co. Westmeath, 4th September, 1895. A large lax form.—H. C. Levinge. "Yes."—H. and J. Groves.

C. contraria, Kuetz., var. *hispidula*, Braun. L. Owel, Co. Westmeath, 20th July, 1895.—H. C. Levinge. "A very interesting form with strongly incurved branchlets, and very prominent primary cortical cells."—H. and J. Groves.

C. denudata, Braun. Brittas Lake, Knock Drin, Co. Westmeath; in fruit 8th October, 1894, without fruit, 4th September, 1895.—H. C. Levinge. "Correct."—H. and J. Groves.

C. tomentosa, L. L. Owel, Co. Westmeath, 20th July, 1895.—W. R. Linton. "Correct."—H. and J. Groves.

C. hispida, L. var. *rudis*, Braun. Brittas Lake, Knock Drin, Co. Westmeath, 11th July, 1895.—H. C. Levinge. "Yes; a slender form."—H. and J. Groves.

Nitella capitata, Agardh. The Washes, Sutton Gault, Cambridgeshire, 21st and 27th May, 1895.—ALFRED FRYER. "Yes."—H. and J. Groves

ADDENDA.

Caltha palustris L. var. *procumbens*, Beck. Rothiemurchus, A. Somerville, in B. E. C. Report, 1893, p. 399.—"Referring to my remarks (l. c.) on this plant, Mr. Somerville has recently shown me three specimens, with good rooting stems, from the above locality. These, as well as the plants distributed, he now informs me were 'got at the same spot in the same small area.' This fact goes a long way to support the statement that the examples distributed would have rooted at the nodes later on."—W. H. B.

Potentilla inclinata, Vill. West Kent. A. H. Wolley-Dod.—Middlesex. J. H. A. STEUART. (See 'Report' for 1893, pp. 412, 413.)—"Dr. Focke, to whom I sent a Surrey specimen, confirms this name in the sense in which I used it (= *P. inclinata*, Auct. mult.), but points out that it should be more properly called *P. canescens*, Besser. According to Zimmeter, *P. inclinata*, Vill. is a name which really belongs to *P. gentilis*, Jord., a plant which comes in a different group. Our *P. canescens* is the '*P. inclinata*, Vill.' of Koch, 'Syn.,' &c."—W. H. B.